Patterns of Consumption Expenditure in Rural Household: A Case Study of Select Villages of Sundargarh District of Odisha

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CERTIFICATE

This is to certify that **Mr. Hemanta Kumar Pradhan** has carried out the research embodied in the present dissertation entitled "**Patterns of Consumption Expenditure in Rural Household: A Case Study on Selected Villages of Sundargarh District of Odisha"** under my supervision for the award of the master degree in Development Studies of the National Institute of Technology, Rourkela. This dissertation is an independent work and does not constitute part of any material submitted for any research degree or diploma here or elsewhere.

(DR. NARAYAN SETHI)
Research Supervisor

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Abstract

Day by day the income elasticity of demand is increasing with the change in income as well as occupation. The traditional MPCE of the rural masses has been largely influenced ad affected by the grip of modernity. The study analyses the pattern of consumption expenditure of rural households to show the frequent changes in both food and non-food consumption expenditure due to the changes in income and occupation of the people. Consumption expenditure is increasing due to increase in urbanization, breaking up of the traditional joint family system, desire for quality food, lack of time which translates in to an increased need for convenience. Increasing number of working women, rise in the per-capita income in forcible situations of other dominants, changing lifestyles and increasing level of affluence of the surroundings with lack of saving attitude and appropriate awareness brought a significant changes in the expenditure patterns among the rural communities. The present study also defines the income elasticity of expenditure as proxy for income elasticity of quantity demanded for selected food and non-food commodities among different income and occupation class in Western Odisha through an Engel ratio analysis. To examine the impact, the actual distribution of monthly per capita incomes and other selected characteristics of different income classes have been taken.

Chapter-I

Background, Issues and Objectives of the Study

The aim of this chapter is to introduce the topic of the study emphasizing the relevance of the study. It also explains the nature, categories of consumption. At the same time it also explains the factors (i.e. income, social barriers, LPG policies, household decision making, time use, information, availability of infrastructure for essential goods and services) affecting consumption pattern. The chapter shows the development scenario of the rural areas of Odisha by taking the Human Development thrusts and ideas. It also includes the problems and limitations as well as conceptual framework, significance, objective, hypotheses, and methodology of the study.

1.1. Introduction

India is a developing country where low infrastructural development coupled with high population growth has made the lives of many poor people very difficult. Still there are wide ranges of variation on educational expenditure in different income groups of the households. The benefits of knowledge and education go to higher income groups of rural households. Similarly in case of medical expenses and other necessary expenses are far away from these deprived masses which show a direct relationship with level of income. The present study relates the consumption patterns of rural households to show the frequent changes in both food and non-food consumption expenditure due to the changes of standard of living, income of the people and modernity of the society, especially due to the impact of Liberalization Privatization Globalization (LPG) plans and policies. Day-by-day the income elasticity of demand is increasing with the change in income. In other words the traditional Monthly Percapita Consumption Expenditure (MPCE) of the rural masses has been largely influenced and affected by the grip of modernity. The present study tries to analyse the changing pattern of rural household consumption expenditure under various changing situations of the society and its surroundings. Majority of consumption expenditure is still at household. For instance, out of household expenditure, consumption expenditure is increasing due to increase in urbanisation, breaking up of the traditional joint family system, desire for quality food, lack of time

which translates in to an increased need for convenience. Increasing number of working women, rise in the per-capita income in forcible situations of other dominants, changing lifestyles and increasing level of prosperity of the surroundings with lack of saving attitude and appropriate awareness brought a significant changes in the expenditure patterns among the rural communities. The study also examines the impact of rapid urbanisation and some sociological changing factors influencing consumption expenditure whether they are radical or remedial. The study also defines the income elasticity of expenditure as proxy for income elasticity of quantity demanded for total food, non-food and selected food group commodities among the rural households. To examine the impact, the actual distribution of monthly per capita incomes and other selected characteristics of the four income classes as identified in the rural region. In fact, better quality of life is an important indicator of economic development and consumption pattern has changed with acceleration in quality of life, proving its significance. But here the question arises, how rewarding is today's pattern of consumption in terms of human satisfaction especially for the poor rural households?

Odisha is situated in the north-eastern section of the Indian peninsula. It is bounded on the north by Jharkhand (formerly Bihar), on the west by Chhattisgarh (formerly Madhya Pradesh), on the north-east by West Bengal, on the south by Andhra Pradesh and on the east by the Bay of Bengal. Agriculture is the main occupation which absorbs nearly 80 per cent of the total work force and contributes more than 50 per cent of the state domestic product (SDP). Odisha is rich in natural resources, but it is also exposed to natural calamities like floods, drought, cyclone etc. which is one of the many reasons attributed for its backwardness from time to time. Odisha is one of the poorest states in India. According to the National Human Development Report (2010) (NHDR 2010), Odisha lies far below the national level development almost in all respect.

The standard of living of a household can be understood from the consumption pattern, and the qualities of consumption budget which clearly indicate the level of welfare of the household. Food consumption pattern of household is an important barometer of individual welfare and well-being in any region. Human life is ultimately nourished and sustained by consumption. Consumption clearly contributes

to human development when it enlarges the capabilities and enriches the lives of people without adversely affecting the well-being of others.

Today's consumption is exacerbating inequalities. And the dynamics of the consumption-poverty-inequality environment nexus are accelerating. If the trend continues without change not redistributing from high income to low income consumers, not shifting priority from consumption for conspicuous display to meeting basic needs then it will worsen today's problems of consumption and the process of human development. Consumption must be (a) shared: ensuring basic needs for all, (b) strengthening: building human capabilities, (c) socially responsible: so the consumption of some does not compromise the well-being of others, and (d) sustainable: without mortgaging the choices of future generations.

Consumption pattern of the rural households depends on many factors like assets, level of education, occupation and demographic characteristics. Saving in any community depends on these factors. The sources of income in the rural household sector are various. In most of the households the main occupation is not the only source of income and in the cultivator households, more than 50 per cent of the household income originate from other sources. Non-agricultural sources are the main source of income for many households in the rural areas of Odisha.

1.2. Categories of Consumption

Consumption categories are formed mainly on the basis of the commodities involved. Broadly speaking there are two categories: Food and non-food consumption. Consumption to gratify hunger and thirst needs is food consumption. The consumption that is not related to the above but meant for satisfaction of health, education, travel and recreational needs is regarded as non-food consumption.

There is yet another classification purely based on the types of needs called primary and secondary consumption. According to this classification we can distinguish between essential and non-essential consumption commodities. Primary consumption involves the fulfilment of needs that arise out of physiological bodily functions like thirst and hunger. These needs are also called biogenic needs. Considering the basic nature, the needs for shelter clothing, health and education can also be included in the

category of primary consumption; the secondary consumption comprises the gratification of a more sophisticated structure of physiological needs which relate to social, cultural and intellectual interests.

1.3. Nature of Consumption

The dynamic nature of human needs gives consumption a dynamic character. Human needs are always subjected to change. The dynamic character of consumption depends on the nature of the society and economy. Variations in consumption are visible in different societies, as there exists, a difference in environmental, social, economic and cultural contexts. Human wants get transformed as the society grows and in turn cause substantial changes in the outlook of the people towards consumption of commodities.

1.4. Factors Affecting Consumption Pattern

Individual consumers are assumed to be in the best position to judge their own needs and preferences and to make their own choices. It is unbiased to assume that people know what they are looking for and have reasons for their preferences when they choose one consumption pattern over another.

Yet millions of people faces too narrow a range of consumptions, which prevents them from enlarging their capabilities. They may not be able to get enough food, may lack health care services or may have little access to transport beyond their own feet. There are many factors causing these constraints on consumption options. Income is not the only one. Other factors include the availability and facility of essential goods and services, time use, information, social barriers and the household setting.

1.4.1. Income

Income gives people the ability to buy nutritious foods instead of eating only their own crops, to pay for motorised transport instead of walking, to pay for health care and education for their families, to pay for water from a tap instead of walking for many hours to collect it from a well.

The increasing dependence of much consumption on private income means that changes in income have a dominant influence on changes in consumption. When income rises steadily consumption rises for most of the population. But for the same

reason, when income decline, consumption also falls sharply, with devastating consequences for human wellbeing.

1.4.2. Social Barriers

Income cannot always remove barriers to access to opportunities. This is particularly so when considerations of gender, class or ethnicity limit people's freedom to consume the goods and services they want. For example, people belonging to certain ethnic groups might be denied equal access to education, employment and other basic social services by the state, regardless of how much they earn.

1.4.3. Globalisation and its Impact on Consumption Pattern

Due to globalisation the purchasing power and opportunity to purchase has increased and a change has manifest in the activity of consumption. Globalisation is integrating not just trade, investment and financial markets; it is also integrating consumer markets around the world and opening opportunities. This has two effects- economic and social. Economic integration has accelerated the opening of consumer markets with a constant flow of new products. On the social side local and national boundaries are breaking down in the setting of social standards and aspirations in consumption. As a consequence, a host of consumption options have been opened for many consumers, but many are left out through lack of income. Spending has shifted from striving to match the consumption of a next door neighbour, to pursuing the life style of the rich.

1.4.4. Household Decision Making

A great deal of household consumption decision making is in the hands of one person- often the mother or the father of the family. Although this may lead to good outcomes, it can also be a source of inequity within the family. The education and background given to children early in life play a critical part in establishing their ability to make good use of the options available for living a full and fulfilling life.

1.4.5. Time Use

Opportunities to consume can be severely limited by lack of time. Women, spend many hours a day meeting the household's needs and have no time left for education, better health care or opportunity activities. Similarly, overworked labourers may

receive an adequate wage, but they often work long hours and are denied the opportunity of regular leave.

1.4.6. Information

Information is the key too raising awareness of the range of consumption options available and enabling the consumer to decide which choices are best. Without information, there is no way of knowing that goods and services are available in the market, and what services are being provided by the state and are, by right, available to all. Advertising and public information campaigns play an important role in this respect.

1.4.7. Availability of Infrastructure for Essential Goods and Services

Many of the most basic essential goods and services like water, sanitation, education, health care, transport and electricity cannot be provided without an infrastructure. Traditionally these facilities have been provided by the community and then by the state. As markets develop and the technology improves, the services increasingly are being provided by the private sector in areas where profit can be made.

1.5. Development Scenario of the Rural Areas of Odisha

Odisha as dependence of population on primary sector occupations is quite high, whereas agriculture with its present state of infrastructure and technology and, above all, operational holdings is itself not in a position to provide a substantial form of gainful livelihood to the majority of rural population. There have been little occupational diversifications of population at the village level. Irrigational initiatives taken through many development projects have failed to achieve desired goal across space and people. Often this serves the interest of only large, medium and semi-medium farmers. Like this, the welfare programmes and Minimum Needs Programme implemented by the state under social sector development to lessen poverty and improve the ‘quality of life’ of poor in rural areas hardly reach the targeted sections of population.

Compared to coastal region, the incidence of poverty is more in northern and southern regions of the State. It is higher among the scheduled tribes as compared to scheduled castes and general castes. Furthermore, the percentage of rural families living below

the poverty line is found to be much higher in the State (66.37 per cent, as per the estimate made by Panchayati Raj Department, Govt. of Odisha in 2007). Besides structural poverty, the state also faces the poverty like conjectural poverty (due to floods, cyclones, droughts, etc.) and destitute poverty (of persons lacking either money or material to survive). In terms of the development indicators like literacy rate, infant mortality rate, per capita income, etc., the living conditions of the people of the state are considerably lower than the national average. Greater inter-district variations in the living conditions of the people exist within the state.

1.6 . Human Development in Odisha

The value of HDI (Human Development Index) for the state as a whole turns out to be 0.579. This may be regarded as a somewhat medium level of human development. Of the three components of HDI, the education index has the highest weight (0.723) whereas the health index has the lowest weight (0.468) and the income index (0.545) lies in between. On the whole, inter-district disparity in HDI values is low [coefficient of variation (CV), (Odisha Human Development Report 2010). This is essentially because there is a bunching of 13 districts in terms of their HDI values (lying between 0.5 and 0.6) around the state mean (0.579).

The value of GDI (Gender Development Index) for the state as a whole is seen to be 0.546; in this, the equally distributed education index has a much greater weight than either the health or income index, as in the case of overall HDI. The highest five and lowest five districts in terms of GDI values mostly correspond to the same in terms of HDI values. As in the case of HDI, inter-district disparity in GDI values is low (CV: 17.16) and this is again because of bunching of the GDI values of 13 districts (lying between 0.5 and 0.6) around the state mean value of GDI (0.546).

The mean value of RHI (Reproductive Health Index) for the state as a whole turns out to be 0.55. This suggests, as in the cases of HDI and GDI, a somewhat medium level of reproductive health status of Odisha. Overall, the three measures of human development suggest a low average attainment, which is essentially due to the fact that a majority of districts have values of HDI/GDI/RHI close to the mean value for the state as a whole. Therefore, the challenge of human development in the context of Odisha is to focus not only on the districts at the bottom end but also on a large

number of districts that are average performers (Odisha, Human Development Report 2010)

1.7 . Statement of the Problem

The 21st centuries' growth in consumption, unprecedented in its scale and diversity has been badly distributed, leaving a backlog of shortfall and gaping inequalities. Consumption per capita has increased steadily in industrial countries over the past 25 years. Still some developing regions are far from catching up to levels of industrial countries, and consumption growth has been slow or stagnant in others. It has been observed that the average African households today consume 20% less than it did 25 years ago.

In India also the existence of large disparities in living standards between regions and between classes of people is found. Wide economic disparities have been observed between the rich and poor especially due to the low rate of economic change among the poor section of the population who generally fail to make use of the development programme. Now economic growth and industrial production has risen to many serious problems. The fruits of development have not been distributed equally among all.

In Odisha, in spite of the various constitutional safeguards and all the different schemes by the state government for the improvement of socio economic condition of the rural masses are found to be much lower than that of the rest of the society. A large percentage of rural people are either agricultural labourers or unskilled workers except in the case of certain castes which follow traditional occupation like cloth washing, basket making and pot making etc. It has seen that very few are able to separate their bond with their age-old occupations and enter in to new areas of employment. Regarding the nature and type of houses occupied by them, a few of the community live in pucca houses. The schemes for giving grants and loans for the construction of the houses for them have not found made any appreciable impact on their environmental and living conditions. They engaged in low paying occupations and most of them don't get sufficient income for their subsistence.

The major items consumed by each household during one month are Cereals, Spices and Salt. Nutritious items like Egg, Milk, Ghee and other luxurious item are not found popular with these households. Even if they are having cattle or poultry the products were to be sold to others to get money for subsistence.

1.8 . Conceptual Framework

Household: A group of person normally living together and taking food from common kitchen constitute a household.

Consumption: It refers to the use of goods and services for the satisfaction of human wants. In other words it is the destruction of utility.

Consumption Function: Relationship between aggregate consumption and aggregate income.

Demand Elasticity: Proportionate change in demand due to change in price or income.

Household Consumer Expenditure: The expenditure incurred by a household on domestic consumption during the reference period is the household's consumer expenditure. The household consumer expenditure is the total of the monetary value of consumption of various groups of items namely: i) Food, pan (betel leaves), tobacco, intoxicants and fuels and light, ii) Clothing and footwear; and iii) Miscellaneous goods and services and durable articles.

Total Household Expenditure: The total household expenditure is composed of expenditure of the household on broad group of items.

The results of total household consumer expenditure expressed are broadly classified under (a) Food total and (b) Non-food total.

Value of Consumption: Consumption out of purchase is evaluated at the purchase price. Consumption out of home produce is evaluated at ex-factory prices. Value of consumption out of gifts, loans, free collection and goods received in exchange of goods and service is imputed at the rate of average local retail prevailing during the reference period (30 days).

Monthly Per Capita Consumer Expenditure (MPCE): For a household, this is its 30 day's consumer expenditure divided by its size. A person's MPCE is understood as that of the household to which he or she belongs. For classifying households and persons by MPCE level, MPCE class were formed. These classes correspond broadly to 5%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 95% and 100% of population.

Groups of Consumption of Items: Results on break-up of MPCE over different items of consumption are presented for 19 broad item groups. These are Cereals, Gram, Cereal substitute, Pulses / Pulse products, Milk and Milk products, Edible oil, Meat Fish / Eggs, Vegetables, Fruits / nuts, Sugar, Salt, Spices, Beverages refreshments and processed Food, Pan Tobacco and intoxicants, Fuel & light, Clothing, Footwear, Miscellaneous goods & services, durable goods.

Durable Goods: Items included here all have a lifetime of one year or more and were distinguished from miscellaneous goods. Consumption expenditure on durable goods includes both expenditure on purchase and expenditure on repair and construction of household durables.

Miscellaneous Goods and Services: This is a residual category covering all items other than food, pan, tobacco, intoxicants, fuel and light, clothing, footwear, and durable goods. It includes expenditure on education, medical care, entertainment, conveyance, rent, and consumer taxes and cesses.

1.9 . Significance of the Study

There are not many studies available relating to the consumption levels of the rural people at the macro level. This is because the NSSO, which is the only official agency that collects such data for the whole country, does not generally publish data separately for rural areas, especially on caste basis. Most of the studies on consumption pattern of rural people are based on secondary data and concentrate on their educational and occupational structure and deal with its effects on their welfare. While studies done on the consumption expenditure among rural and urban households for various expenditure classes, little effort has been made to study the consumption expenditure pattern within rural sector. On the other hand the study on

household consumption expenditure pattern is very important as it is related to poverty and standard of living of our society. It is necessary to study the changes in food consumption pattern under the changing situations of liberalisation, privatisation and globalisation. The analysis of changing consumption pattern over time would help in designing appropriate policies related to food production and distribution. It is an excellent indicator of economic wellbeing of people. If the society is wealthy proportionately high expenditure will be made on secondary necessities, comfort, and luxury products and conspicuous consumption. On the other if the society is at substance level, people will spend proportionately more on food. The study of pattern of consumption expenditure provides an important indicator of economic development. It will help to study the changes in booth food and non food consumption pattern in rural and urban areas of Odisha and to estimate the expenditure elasticity of demand for products in rural and urban regions. It also helps to define the factors influencing consumption expenditure and to analyse constraints in the consumption of products in rural and urban areas.

1.10. Relevance of Selecting Sundargarh as Sample Area

As per census of India 2011, in Odisha rural population constitute 83.32 % of total population and Sundargarh is one of the district where 64.50% of total population of the district live in rural areas.

As per 2011 census the rural literacy rate of the district is 67.27 % with a male literacy of 76.63% and female literacy of 58.02%. Female literacy of Sundargarh district is low as compared to other. Whereas the urban literacy rate of the district is 86.28% with a male literacy of 91.41% and female literacy of 80.68%.

Because of hilly and sloping nature of landscape, the district is subject to rapid runoff leading not only to soil erosion but also to scarcity of water for both agriculture and drinking purpose. In the study area majority of workers belongs to agricultural works. Some workers are also belongs to industrial labour as it is nearer to the steel city Rourkela. Around 30% of the total rural population of the district belongs to agricultural labourers. Hence Sundargarh district has been selected to study the socio-economic status of the rural communities and their consumption pattern.

1.11. Objectives of the Study

The study broadly examines the pattern of consumption expenditure in rural households of Odisha, specifically the objectives are:

(1) To examine the impact of income and occupation on consumption expenditure among the rural population of Sundargarh district of Odisha.

(2) To analyse the factors influencing the rural consumption pattern.

1.12 . Methodology of the Study

An Engel ratio for each item of expenditure to total expenditure has been estimated for each item of food and non-item separately. Than sample households have been grouped into different comparable expenditure class. Engel ratio for each item of food, non-food is estimated for each expenditure class. Examination of the differences in the expenditure on non-food as well as food items among the households belonging to different income levels, education levels, occupation categories and size of the family has been taken and done by finding out the association between Monthly Per capita Consumption Expenditure (MPCE) and its categorisation derived from total annual expenditure in all items. Sample households have been grouped into different expenditure classes and income classes for better understanding. Similarly for finding out the association between expenditure pattern and occupation sample households are grouped in to different occupation groups. Per capita Expenditure on each food and non-food item has been studied for identifying necessary and luxury items in the consumption baskets. Possession of durable goods by the households has been analysed to study the tendency of luxuries consumption among them.

1.14. Organization of the Thesis

The present study is organized into five chapters including the present one. The present chapter introduces the study, gives an overview idea of the factors affecting consumption pattern and spells out the scope and objectives, methodology, data sources and the period of study. The second chapter reviews some of the existing theoretical and empirical studies made on the pattern of consumption expenditure in rural household. This chapter reviews briefly the various developments in consumption theories.

The third chapter analyses the socio economic characteristics, sources of income and consumption expenditure pattern of the rural households. It also shows the relation between average income and pattern of consumption expenditure among different occupation groups and different income groups. The fourth chapter brings out a detailed discussion about the tools of time series and methodology used for study. Here the consumption pattern of rural households is analysed by studying the differences in the expenditure on different items in the consumption baskets by taking 12 food items and 13 non-food items. It also attempts to examine the differences in expenditure on each of food and non-food items. The final or the fifth chapter summarizes the study and suggests some policy implication.

Chapter-II

Review of Literature and Theoretical Framework

The present chapter contains the review of various related studies and the theoretical framework. Consumption is the predominant component of aggregate demand in an economy. For this reason consumption behaviour occupies a central position in modern macro theory. Consequently the subject has been widely discussed in the literature survey. This chapter reviews briefly the various developments in consumption theories for better understanding.

2.1 . Review of Related Studies

Chudali et al., (2011) stated that there is a wide range of variation on educational expenditure in different income groups of farm households. The benefit of knowledge, medical expenses, and education goes to higher income group of rural households. The expenditure shows a direct relationship with level of income. The study relates the consumption patterns with income and employment of Nepalese people at different topographical situation. Five villages have been selected to conduct the study. They found that, income elasticity of demand for food overall is 0.40 which means that the 0.41 per cent change in demand for food, if 1 percent change in the income.

Rout (2009) examined the variation in food consumption and nutritional status of women in the state of Odisha in rural and urban areas against different background variables by using the NFHS-II data on 4425 ever married women in the age group 15-49. He defines the difference between standard and actual level of food intake among different groups of women. He found that, 33% of urban women and 48.6% of rural women are in the low BMI group and urban women enjoy a better position in all the food items. So, nutritional status is positively related with education of respondent, education of husband, household standard of living, and occupation of husband. Most of the rural women when categorized were found to be taking less food than their requirement. All these clearly suggest a condition of emergency for improving the nutritional status of women in Odisha, especially in the rural areas.

Pavithra et al. (2009) studied on the food consumption pattern in Karnataka taking NSSO data conducted in 1993-94 and 61st round 2004-05. They use the percentage calculation to analyse the changes in pattern of food consumption over years and state that the monthly per capita cereal consumption has declined from 13.15 kgs to 10.73 kgs in rural areas, while in the urban sector it was from 10.87 kgs to 9.7 kgs. They found that the consumption of cereals has declined in Karnataka over the periods. The monthly per capita consumption of pulses was almost stable over the two periods in rural and urban areas of Karnataka. The monthly per capita expenditure (MPCE) on food was Rs.167 during 1993-94 in rural areas and it increased to Rs.283 during 2004-05. In urban area, the MPCE increased from Rs.236 to Rs. 447. The expenditure elasticity for all food groups were less than unity in urban areas with the highest value being 0.96 for vegetables.

Fernandez et al. (2007) examined facts from consumer expenditure survey data and stated that both expenditures on nondurables and durables have a sizable hump, around 50% of which is accounted for by changes in household demographics. The other half remains to be explained by factors not present in the standard complete markets life cycle model of consumption. They plotted life cycle profiles of total expenditure i.e. expenditure on durables and expenditure on nondurables, controlling for group and time effects. They gave special emphasis on the comparison of different approaches to control for changes in demographics over the life cycle. Significant changes have been observed over the life cycle for total, nondurable, and durable expenditure.

Kumar and Aggarwal (2004) determined the extent of poverty in Delhi slums through consumption patterns, employment and educational status of the slum population. They found a very low level of education of the migrants, gender disparity in economic status, and a significant number of households below the poverty line. Most of the household made an average expenditure on food from their income. A sample of 196 was taken for the study, reflecting diverse age, income, education, households' size and food consumption pattern. Simple random sampling was used to include every item of the population with an equal chance to avoid personal bias. The survey work was conducted in July 2001.

Reddy (2004) showed a large difference in both production and consumption of pulses across regions, and the increase in imports due in the name of modernisation. He stated that, as there is a growing demand for pulses for consumption in the domestic market, as pulses contribute essential amino acids in the human diet. Short supply of pulse crops has led to increase in prices, there by pushing pulses out of the reach of poor households which negatively affects their nutrition and productivity. The evidence showed that to increase pulses production and consumption, there should be a region specific approach, as different pulse crops grow in different regions. The study argues that an improved package of practices, technological interventions and region-specific approach are needed to alleviate the problem of short supply of pulses and chronic malnutrition among the people.

Gangopadhyay and Wadhwa (2004) examined the changing pattern of household consumption expenditure to examine the household behaviour which was purely a statistical exercise, suggesting what can be done, rather than what should be done. In particular, it was not an econometric exercise. It was more of an exploratory trip, trying to identify issues that are worth examining in a more rigorous fashion. They have found a general growth in expenditure is sufficient to clear us of poverty. They have suggested that, given our self-sufficiency in food availability, it is time to improve the availability of those services that improve the quality of life. Policies need to be directed towards the group miscellaneous services, many of which depend on the available infrastructure.

Pendakur (2001) estimated the poverty rate as the proportion of individuals who have consumption- rather than income- lower than the absolute poverty line based on survey data. Here, consumption was adjusted for differences in the prices faced by, and the demographic characteristics of different households. As with income poverty measures, the consumption poverty rate was found declined over the 1970s and 1980s however, the 1990s, the consumption poverty rate increased by more than half between 1992- 998.

Deaton (2000) estimated poverty and inequality in India considering related evidence from C.S.O, National Accounts of Statistics and NSSO. It was found that per capita expenditure grow more rapidly across already better of states than the poorer states.

Rural urban disparities of per capita expenditure were found to have increased, also inequality with in urban areas. Examination of other indicators of living standards such as literacy rate, nutritional level, health achievements, it was found that social progress has been uneven across the different fields. Significant increase in economic inequality is found.

Andrew (2000) examined the relationship between average household living standard and inequality by using annual time series data for Indian state. Causality tests are applied to investigate the relationship between household consumption and subsequent inequality on the one hand and initial inequality and subsequent consumption on the other. Lower inequality has generally been associated with higher future consumption levels, but urban sectors of some state's consumption are positively correlated with subsequent inequality.

The household expenditure survey (1999) conducted on the expenditure pattern of households in Malaysia to determine the goods and services to be included in the basket of the consumer price index showed an increase trend on consumption expenditure by households in Malaysia between the periods 1973-1989. Results have shown that about 80 percent of the household's expenditure is spend on four main groups namely food, rent, fuel and power transport and communication, and miscellaneous goods and services which includes food and beverages away from home. On an average household living in urban areas spent 105 times higher than households living in rural areas.

Jacoby and Skoufias (1998) examined consumption behaviour of agricultural households of rural India respond to anticipate and unanticipated seasonal income fluctuations. Using information on village-level rainfall surprises, they estimate the idiosyncratic unanticipated income shocks by allowing weaker risk to impact households differently depending on observable characteristics. They did not found any evidence against the households' smooth idiosyncratic fluctuations in their income. Their approach uncovers several interesting features of rural credit and insurance markets. Households in some villages are largely vulnerable to aggregate risk, in that the magnitude of their seasonal consumption changes varies significantly

from year to year, while households in the other village seen better able to use credit markets and informal exchange to absorb aggregate shocks.

Maifi (1998) used NSS data for the period 1953-54 to 1989-90 to study the incidence of urban poverty. The inter temporal change in inequality in urban consumption expenditure had been analysed on the basis of Lorenz ratios of size distribution of per capita expenditure in nominal terms both for the poorest and richest 20 percent of urban population has registered a substantial increase in the late 1980's compared to the early 1950's. The poverty measure head count ratio and Sen's index showed that the percentage of people below poverty line increased up to the mid 1960's and then declined very sharply till latest NSS round.

Jones and Martin (1997) examined that patterns of consumption are affected by changes in economic status and domestic responsibility, as young people become independent of their parents and set up homes of their own. The research was based on the Family Expenditure survey annual data on over 2000 young people aged 16 to 25 years. They take 1992, 1987 and 1982 data sets, and examined the ways in which patterns of spending have changed over the decade. The research has indicated that there are different dimensions of consumption. Spending on one may not parallel spending on another.

Sooryamoorty (1993) identified the significance of certain socio-economic and geographical variables that have an enhancing role in the new trend of consumption in Kerala. Developing an operational definition of the concept of consumption he empirically tested the relevance of the chosen variables at the micro level. The study pertained to lower and middle income classes and was based on data collected from households. The per capita expenditure classification showed that 80 percent of the population fall under the broad per capita monthly expenditure class of Rs. 101 to Rs. 600 and the rest above Rs. 601. Consumption items like beverages, refreshments and processed food, clothing and foot wear are chosen for the analysis and expenditure incurred on these items were analysed to find the influence of independent variables namely income, occupation, educational standard and geographical factors. It was found that the role of the independent variables on influencing the expenditure pattern of the respondents varied from item to item. The variables like income, occupation

and education were found to enhance the expenditure on all the chosen items. Except in the purchase of beverages, refreshments and processed food; the level of consumption in both rural and urban areas of Kerala remains similar. The study identifies the middle income class, the employed in regular salaried jobs and the well educated as the category of consumers who spend noticeably on the items under study.

Subramanian and Deaton (1991) examined the effects of gender discrimination on household consumption pattern using the household expenditure data from the NSS. Engel curves had been estimated including detailed demographic variables and tested for the effects of gender in the pattern of demand. Substantial gender related effects in the consumption pattern of households for food and non-food groups were examined. The relevant household characteristics considered were occupational pattern of the head of the household, which included (1) those with the head self-employed in non-agricultural activities, (2) agricultural labourers, (3) non-agricultural labourers and (4) self-employed in agriculture. Religion of the household including (1) Hindu (2) Muslim and dummy indicating that household head belongs to scheduled caste or tribe also included. The results indicated that scheduled castes and tribes consume less wheat and more coarse cereals. In facts the same was true for both agricultural and non-agricultural labourer households of the same size and same budget. Households: with more adult women than men, consume more of these basic foodstuffs. The consumption of meat was found much higher among Muslim households and those from Scheduled castes and tribes. At the same total budget, larger households substitute towards sugar, fruits and vegetables and away from milk. Medical expenses, like educational expenses were a luxury good. Poor levels of living of the population were revealed from low per capita consumption expenditure, high proportion of persons below poverty line and high food share. The findings revealed that addiction to liquor and intoxicants was the primary cause for their economic backwardness, social, degeneration, land alienation and even sexual exploitation of the women.

Gopalakrishna (1990) identified some evidence of low consumption level, the attention on inter-regional inequalities and particularly disparities in agricultural incomes and the increases in the overall saving rate and changes in the composition of

savings and asset holding in rural areas are the causes of consumption disparities, food surpluses and failure of effective demands. He has stated that, during drought the rise in the savings rate is a reflection of growing disparities, and some of the savings brought about through a reduction in real consumption. These interlinked factors explain the variations in weather cycles which tend to cause larger swings in income and employment.

Ravallion (1990) measured the effects of shifts in budget constraints or households parameters on under nutrition using household level data collected by National Socio-Economic Survey, the Central Bureau of statistics on calorie consumption incomes, price, and other household characteristics. The study has estimated the calories intake functions and used them to stimulate the effect of income changes on various measures of calorie under nutrition. From the results it follows that inter household variation in reference to calorie consumption was due only to differences in the price and income parameters of household budget constraints. Even though rural-urban inequality tended to be pronounced; the urban, rural sectors have similar levels of calorie under nutrition.

Jackson (1988) analysed the food consumption pattern among the urban and rural households by the double log model for estimating elasticity. He has made a socioeconomic survey of 301 households with children aged 0-36 months in St. James during 1982, using stratified random sampling. Expenditure elasticity's for food were 0.66 and 0.86 in the urban and rural areas respectively, and the corresponding calorie elasticity's were 0 to 0.23. In the urban areas, fats/oil consumption had the highest elasticity in the bottom income quartile, while animal had the highest elasticity in the bottom income quartile, while animal products had the highest in the top. In the rural areas self-provisioning was most elastic among the highest elasticity in the top quartile.

Mukhopadyay (1987) examined the nature of interstate differences in the expenditure patterns of rural households. The analysis has covered three item groups i.e. cereals substitutes, all food and all non-food. To examine the nature of interstate differences in expenditure patterns pair-wise analysis of covariance test has been applied to item specific Engel curves for each pair of States. The state-wise average elasticity's for

different items have also been examined. On obtaining significant inter-state difference in item specific expenditure patterns investigation had been made to examine how far the observed differences in expenditure patterns could be explained by the variations in the item-wise cash expenditure patterns across states. The study has revealed that the expenditure patterns of rural households in India for cereals and cereals substitutes and all food items as reflected· by Engel elasticity's and ratios are considerably different across states.

Gupta (1986) examined the aggregate consumption behaviour and trends in consumer expenditure using C.S.O estimates of private final consumption expenditure for the time periods 1950-51 through 1978-80. The study has applied the Ordinary Least Square to estimate various parameters of different consumption functions. M.P.C had been found to vary between 0.84 and 0.90 for the reference period of 30 years. The MPC's are found to be very high for food items relative to those of non-food items. The computed elasticity's indicate that food items were necessities while most non-food items behave as luxuries and semi-luxuries. The estimated equations show the unexpected positive effect of prices on consumer expenditure on non-food items. The food items had negative price elasticity's. Sectorial distribution show that MPC declines with sectorial shifts in favour of agriculture.

Savant (1982) made an assessment of relative position of the extent of poverty by analysing the state of nutrition in different states of India. The assessment of extent of under-nutrition and malnutrition was based on the state wise information relating to the intake of calories and proteins given in the NSS report 26^{th} round. In defining poverty-level-income separately for different states the study noticed absence of uniform pattern of consumption behaviour over different levels of prices of the specified commodities faced by consumers in different income groups with in the same region. Besides, the composition of commodities varied over the states and even over the income classes with in a state. The results have showed that most of the states had about 20 to 40 per cent of their population severely under nourished.

Adam (1980) examined poverty based on house budget survey data budget shares for four groups of commodities and household demographic attributes. Expenditure on consumption per equivalent adult is considered as individual welfare measure.

Poverty indices were calculated to examine poverty gap, social ability to eliminate poverty by income transfers and inequality among poor. The study has used head - count ratio defined as proportion of households with equivalent expenditure below poverty as poverty measures. Poverty indices have been calculated for selected socio-demographic groups. A significant change in poverty was noticed with persistent poverty resulting for pensioners, farmer's and low educated persons.

Bhattacharya and Chatterjee (1971) stated the major limitations of the price differential indices, the exclusion of item-groups like education and durables from the scope of the index in their report on consumer prices and per-capita household consumption in rural India: variation between states. They had make their analysis on household budget data collected in the 18th round (February 1963-January 1964) of the NSS for constructing indices of consumer price variation between the rural areas of different states of India. The budget data are used for estimating weights as well as consumer prices of 56 items covering food, pan, tobacco and intoxicants, fuel and light and clothing groups of the household budget. They have argued on consumer price indices which are computed for comparing the price level in each state with that in rural India as a whole is not correct. The comparisons require indices comparing price levels in each pair of states. NSS household data for the purpose of construction of consumer price indices which are not collected specifically cannot be comparable between the states which lead to partial findings by the unrecognised factor of quality variation. The limitations of interregional comparisons of consumer prices are required. No attempt has made to overcome the problems created by climatic or other environmental factors leading to variation in consumer tastes and needs.

2.2. Theoretical Background

Consumption being the most fundamental aspect of economic activity; it is not surprising that the study of consumption behaviour has occupied a pre-dominant position in economic science. The study of what, how much and when individuals consume had been the concerns of economists. This is not surprising for the consumer occupies the centre stage in economics.

2.2.1. Consumption Hypotheses

John Maynard Keynes (1936) mainly looked at consumption from a macroeconomic perspective. He saw aggregate consumption expenditures as important components of national income. Keynes argued that with rises in income, consumption would also increase, but not as fast like income. When income raises the marginal propensity to consume (MPC) would go down as consumer needs are satisfied. Keynes regarded effective demand by the consumer as the principal vehicle of economic growth.

Amartya Sen (1985) focused not on the ownership of commodities but on the uses to which they can be put in extending people's capabilities. Commodities were important for enriching human lives, but their effectiveness depends on personal characteristics and social circumstances, variations in which contribute to inequalities in a society.

In the late nineteenth century, the fusion between the theoretical and empirical approaches were found in the writings of Marshall, which encouraged agricultural economists to apply the newly discovered technique of correlation to the analysis of single markets. Marshall's great contribution was the clarification and elaboration of the concept of elasticity of demand, which offered a precise framework within which numerical measurement of market characterizes.

2.2.2. Review of the Theory of Consumption Behaviour

One of the major debates in modern macro-economic theory centres on the question of which relationship proportional or non-proportional- is correct? There are various theories. The Absolute income theory argues that the proper relationship between consumption and income is non-proportional and is characterised by short run consumption function. The relative income theory and permanent income theory as developed by James Tobin, Duesenberry and Milton Friedman argue, for different reasons that proper relationship is proportional and is characterised by long run consumption function. Consumption is the predominant component of aggregate demand in an economy. The problem of consumption behaviour can be taken up either at the micro level or at the macro level. These two approaches are now well established by bringing out a revolutionary change in the Keynesian Psychological law of consumption function. Thus the main general theories that currently exist on the determinants of total consumer spending are:

2.2.2.1. Relative Income Hypotheses (RIH)

Duesenberry (1949) states that, the consumption behaviour was interdependent and consumption relations were not reversible overtime. He argued that consumption of an individual not only depend on his absolute income, that is on his percentile position in the income distributions further the current income but also on the past level of income. It was particularly difficult to reduce previously attained level of consumption than to reduce the saving. This reflected the cyclical behaviour of c/y. The theory explained both time series and cross-section formulations of consumption behaviour. The RIH was formulated as:

$$Ct/ Yt = a-b (Yt/Y0).$$

2.2.2.2. The Permanent Income Hypotheses (PIH)

Friedman (1957) states that the level of consumption is determined by the level of permanent income, with Average Propensity to Consume (APC) out of permanent income remaining constant as permanent income increases and APC out of current income declines as current income increases above the permanent income in the short run. The ratio of permanent consumption to permanent income was independent of the level of permanent income.

Let Y represent a consumer unit's measured income for some time period, say a year. This income to be treated as the sum of two components: permanent income (Yp) and transitory income (Yt) or Yp + Yt. The permanent income is roughly akin to life time income, based on the real and financial wealth as the disposal of the individual plus the value of one's human capital in the form of inherent and acquired skills and training. The transitory income was to be interpreted as reflecting all other factors like wind fall gains or any 'accidental', chance 'occurrences', and any kind of cyclical fluctuations in the economic activity.

Similarly C = Cp + Ct.

Friedman took the expenditure on durable as investment and services as derived from stocks of durables in Cp.

Cp is always positive. It is affected by some factors like rate of interest (r), ratio of propensity and non-propensity income to wealth (w) and propensity to consume (u).

Accordingly Cp = kYp where, k=f(r,w,u). Propensity to consume is influenced by factors like population increase tended to urbanisation, sharp decline in size of families and state for social security.

2.2.2.3 . The Life Cycle Hypotheses

Modigliani and Albert Ando (1963) and later by Bromberg states that, the typical consumer had to choose a consumption stream to maximise an utility function, defined on present and future consumption, which was subject to a lifetime resource constraint, and which was itself stable over time. The consumption of a consumer depends on the resource plan available to him over his entire life span, the rate of return capital and the age of the consumer. Available resources mean existing net wealth plus the present value of all current and future non-property earnings (labour earnings). Accordingly a consumer allocates his income, accounting all his present resources, to maximise his utility over his lifetime. Thus an increase in income will add in consumption to the extend it adds to total lifetime resources. Obviously, the consumption depends on these resources (labour and property) instead on current income. The consumption level of a consumer throughout his life is somewhat constant or slightly increasing.

In the above each has been used on time series as well as cross section data and to derive macro as well as micro relationship. Each was put forward originally in terms of individual behaviour and then generalised to aggregate behaviour. It assumes a relationship between consumption and income, though the concepts underlying these terms may very substantially. In other words the idea is to isolate the influence of income, and occasionally of wealth, on consumer spending, holding constant the effect of other possible relevant, less important variables like age, family, composition, residence, education etc.

2.3. Conclusion

In the conclusion of the above theories and literature, we found that consumption does not depend upon income alone as made out by Keynes's psychological law of consumption function. The relative and permanent income hypotheses hold that relation between consumption and income is proportional whereas absolute income theory holds that the basic relationship is non-proportional. From the literature it

shows that, there is no surety that the influence of many socio-economic and religious factors will be enough to shift or to drift the consumption function upward at the rate necessary to give a long run proportionally between income and consumption.

Chapter-III

Socio Economic Characteristics and Consumption Pattern of Rural Households in Odisha

The present chapter analyses the socio economic characteristics, sources of income and consumption expenditure pattern of the rural households. Income and consumption pattern of the rural households depend on many factors like assets, level of education, occupation and demographic characteristics. Saving in any community, thus, depends on these factors. The sources of income in the rural household sector are various. In most of the household the main occupation is not the only source of income and in the cultivator households, more than 50% of the household income originate from other sources. Non-agricultural sources are the main sources of income for many households in the rural area that we have found in the study as shown in chart 3.2.

3.1. Introduction

The development policy in India is based on the principle of "growth with equity". It did not take much time for the development planners in India to realize the bi-directional linkages between social well-being and economic development. But in the implementation phase for the grassroots rural poor, it fails and forgets its objectives. The policy of protective discrimination was intended to reduce the vast inequalities between the deprived rural poor and other strata of Indian society. Its main purpose was to enable the deprived group, to educate themselves and seek secular employment, so that they may be free of their traditional restraints. The outcome of social and economic reforms is far from actual development as far as achievement of the stated goals. In India a large section of population lives in rural regions continues to be outside the reach of development programs. The share of population lacking basic facilities is still large, most of who are below the poverty line. So it is necessary to give focus on their consumption pattern as it is an important indicator of economic development and to know the actual parameters of development, need for the rural people.

3.2. Demographic Characteristics

The demographic characteristics have an important bearing on the level of income, consumption expenditure and saving of the society. Feature like rate of growth of population, educational level of the head of the household and other members, their occupation, the age of the members of the household, the size of the family are some of the factors which have a direct effect on the saving of the community, especially in the rural areas.

The sample selected included 200 households. The villages selected were Pahadtoli, Jaratoli, Militoli belonging to the Santoshpur Panchayat and Bisra block of Sundargarh District. Each of these villages has its own agro climatic and socio economic conditions and hence, the samples selected also tell these socio economic features. The specifications of these villages are given in table 3.1.

Table 3.1: Socio-Economic Indicators of the Sample Villages

Features	Jaratoli	Pahadtoli	Militoli
District	Sundargarh	Sundargarh	Sundargarh
Block	Bisra	Bisra	Bisra
Wards (Nos.)	1	1	2
Population (Head count)	39	357	507
Literacy	24%	23%	44%
Main Occupation	Non-Agricultural Labour	Non-Agricultural Labour	Non-Agricultural Labour
Main Crops	Paddy	Paddy	Paddy

Source: Gram Panchayat, Santoshpor

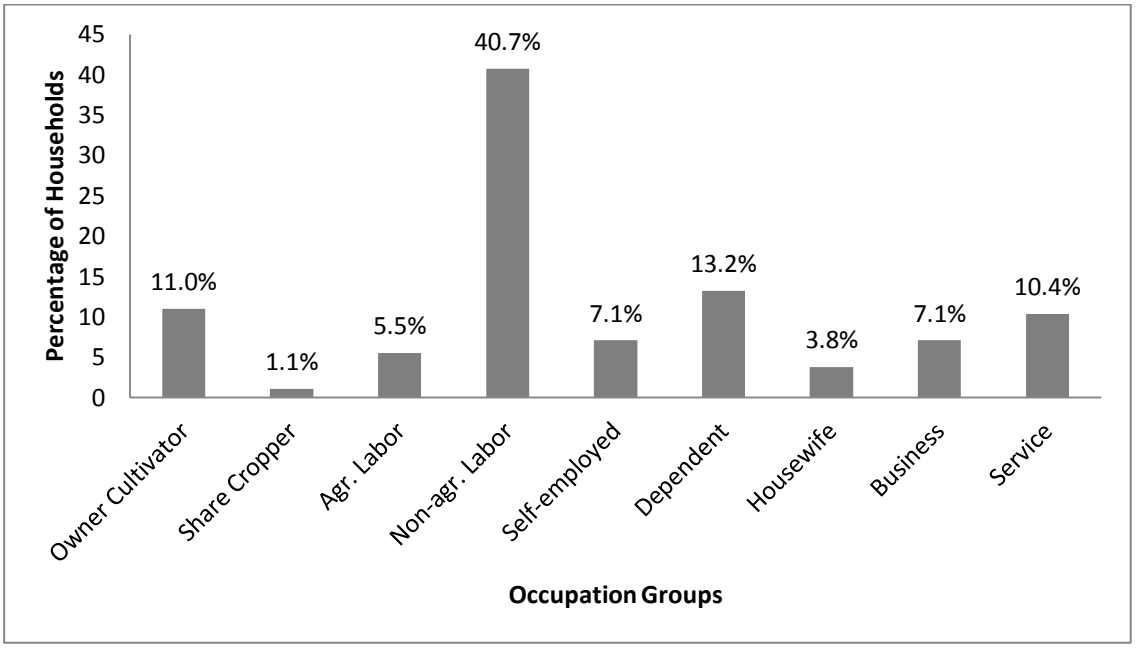
In terms of area and population Pahadtoli is the smallest whereas with almost double the area and population Militoli is the largest of the sample villages. Though agriculture is the main occupation of the people but due to lack of rain and interest among the people, they prefer only one time paddy cultivation throughout the year, and in rest times they played as non-agricultural labour. In Pahadtoli and Jaratoli the nature of land and agro climatic conditions have favoured cash crops like ground nut and some other vegetable but due to the uncertainty of weather during the study period, people cultivated only paddy. In Militoli people prefer some cereal kind cultivation like Mug dal, black gram including the paddy cultivation. This village is a

kind of multi religious village and most of the villagers those who are belongs to Muslim community having no land. Around 48% household heads of the total sample are illiterate.

3.2.1. Different Occupation Groups

The selected sample is a representation of the total population. As far as possible all the different occupation groups are given proportional representation in the sample. As such, the sample consisted of 41% non-agricultural labour, 14 % self employed having business also, 11% owner cultivator, 5% agricultural labour, and 10 % salaried households as shown in the chart 3.2. The occupation of the head of the household is considered as the main occupation of the household.

Chart: 3.2: Percentage of Households falls under Different Occupation

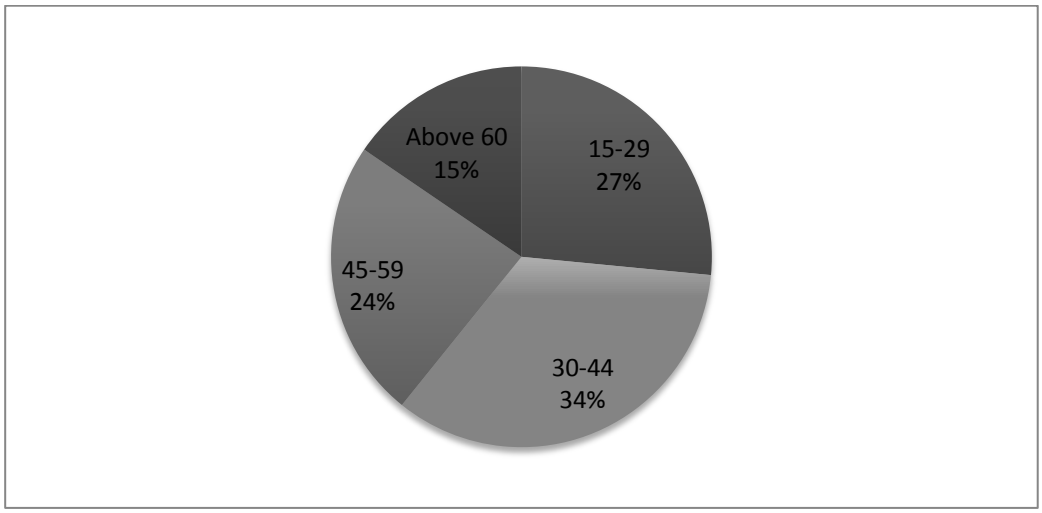


Source: Author's Calculation

3.2.2. Different Age Groups (Household Head)

The average size of the family is 4.96. As much as 85 % of the head of the household belongs to the age group of 15-59 which may be natural in any population group as shown in the chart 3.3 below. Population above 60 years and below 14 years are supposed to be unproductive.

Chart: 3.3: Percentage of Respondents Falls under Different Age Groups

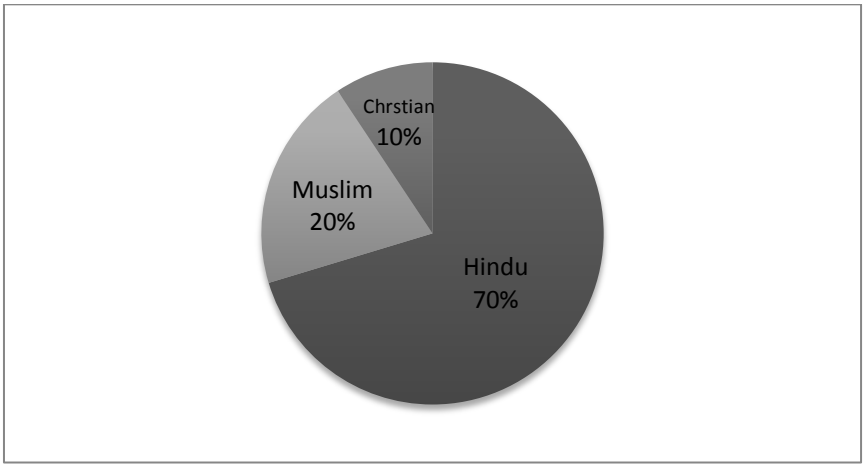


Source: Author's Calculation

3.2.3. Religion

Religion also plays an important role in affecting the consumption patter of the rural households. The households belongs to the Christian community don't spend more on health check up as they much believe in god's supernatural power for their treatment. Similarly, throughout a year different religious community used to perform different festivals which is not homogeneous neither in terms of believe nor in terms of expenditure. The households belongs to Muslim community spend more during Eid. Out of the total population 70% belongs to Hindu and 20% belongs to Muslim and rest 10% belong s to the Christian community as shown in chart 3.4.

Chart: 3.4: Percentage of Population Falls under Different Age Groups



Source: Author's Calculation

3.2.4. Earners and Non-Earning Dependents

The ratio of earners to non-earning dependents indicates to the work participation ratio and the division of the society into productive and unproductive members. The work participation rate at younger ages is comparatively high which can be explained with the help of table 3.5.

Table 3.5: Income Earners and Non-Earning Dependents in the Sample

Total Members	903
Income Earners	270
Non-earning members	633
Ratio of earners to non-earning members	1:2.34
Proportion of earners to total members	29.90
Average number of earners in the household	1.48

Source: Author's Calculation

There are 270 income earning members in a total of 903 members and thus, the ratio of earners to non-earning dependents is 1:2.34. The earning member per household is only 1.48 which leads to a fair dependency ratio. The irregular work participation rate of the younger age groups and the proportion people above 60 probably explains this dependency ratio.

Number of income earners in the household, to some extent, determines the level of income of the household. In the rural areas, where the income is low due to unavailability of works and lower wage rate, increase in the number of earning members will influence the income level and thus the consumption pattern.

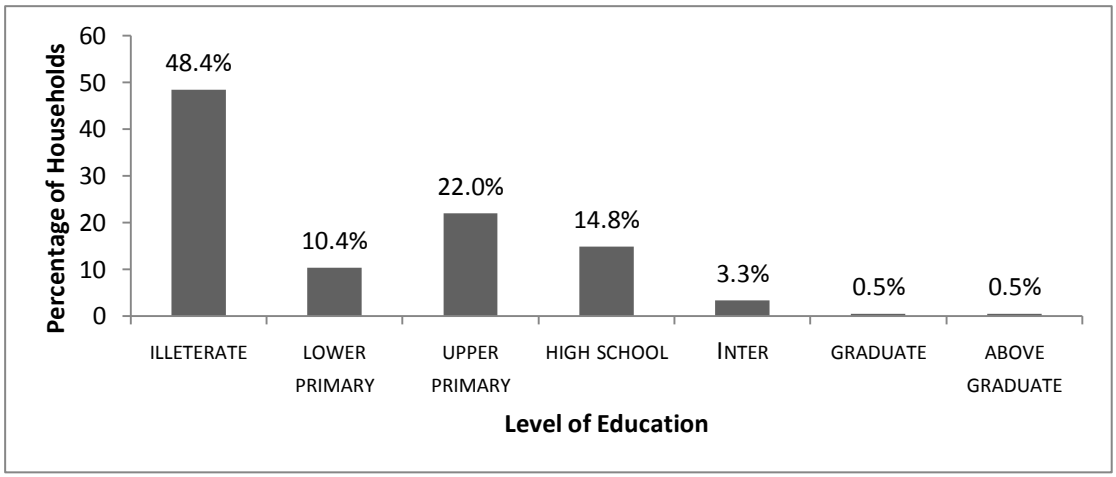
As majority of the families are small families there are only one or two earners in 83.34 per cent of households. There are certain households where the members of different generations live together thus leading to more number of earners. Households having more than two earners amount to 16.66 per cent.

3.2.5. Level of Education

The level of education of the head of the household and that of other members of the family determines the nature of occupation they are involved in, the level of income that they get and the motivations for saving. On the other hand the level of education

of the female members likely to have a positive influence on the saving rate. The percentage of households and their level of education are shown in the table 3.6 below.

Chart: 3.6: Percentage of Households and their Educational Qualification



Source: Author's Calculation

Around 48 per cent of the sample is illiterate. This shows very peculiar poor characteristics of the sample which affects their nature and function over consumption expenditure. Only 14 per cent reached high school, 22 per cent upper primary, 10 per cent lower primary and rest 1 per cent possess graduation.

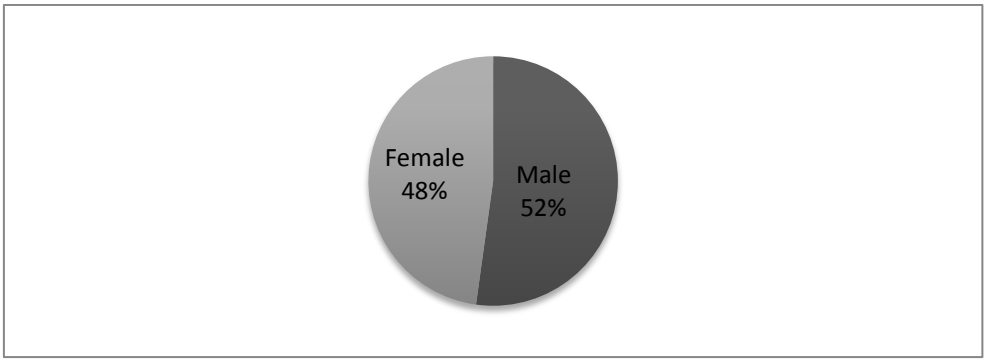
As the level of education is one of the deciding factors of the occupation in which one is engaged in. Generally those engaged in lower occupations have less of educational qualifications where as those with higher education are engaged in higher income occupations. Among the different occupation group, the salaried group have more education compared to the groups with 32 per cent having primary education and those of illiterates. Some of those who are employed in self- employment activities in non-farm sector have primary education. Agricultural labour households are the least educated with 72.58 per cent illiterates and 12.90 per cent having only primary education.

3.2.6. Sex of the Respondents (Head of the Household)

Out of the total households 52.2 per cent households are headed by men and 47.8 per cent households have female as shown in chart 3.7. As the sample covers most tribal

people so in most of their household, the female used to play a major role. The male used to only drink and work.

Chart: 3.7: Sex of the Respondents

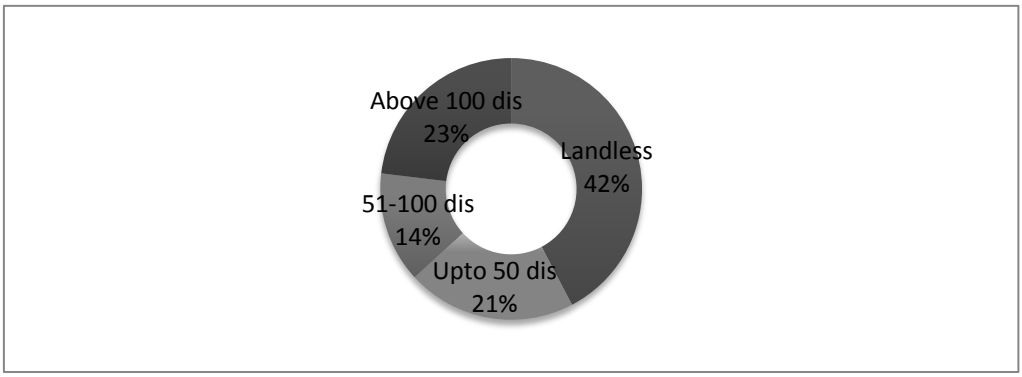


Source: Author's Calculation

3.2.7. Size of Land Holding

For any economic unit wealth reflects the net result of accumulated savings, revaluation of assets and capital transfers ever since the unit came into existence. The size and pattern of assets held by the households determine the income enjoyed by the household as also the amount of income saved and the pattern of investment of saving. The size of land holding by the sample households are shown in chart 3.8.

Chart 3.8: Percentage of households and their land holding



Source: Author's Calculation

In the distribution land there are great disparities. The average extent of land owned by all households is .86 dismal. However, 42.3 per cent of households belongs to land less community, only 20 per cent households have up to 50 dismal land, 13 per cent have up to 51 to 100 dismal and the rest 23 per cent household have more than one acre land area.

3.2.8. Value of Assets (All Sample Households)

The proportion in which assets are distributed between productive and unproductive items holds the key for the level of income and consumption expenditure of households. The households possess both physical assets and financial assets. In the rural areas a good portion of the assets are held in the form of physical assets and very little in the form of financial assets. The physical assets are land, buildings, livestock, agricultural tools and implements and other household durable goods. Valuation of most of these assets involves a lot of problems. For the valuation of land, consultation with local people been considered. Since land values change with changes in locations, an average value of the area for each type of land has been worked out. For estimating the value of buildings, the year of construction, type of construction, materials used are all considered. Livestock is valued at the prevailing rates in the market whereas adequate discounting is made in the valuation of agricultural equipment's, consumer durables and other assets.

Financial assets considered include deposits, post office saving, claims on chit funds, insurance and provident fund contributions, jewellery, shares and debentures and government securities. However, currency has been left out since the households are reluctant to disclose the same. Jewellery is included in the financial assets.

The average value of all assets both physical and financial for all households is to be around Rs. 66000 out of which 93.45 per cent in physical assets and the rest in financial assets.

3.3. Income and Consumption Expenditure Pattern

The significance of income is the most important determinant of consumption. The rural households derive their income from various sources like agriculture, livestock and poultry, wages and other self-employed activities. For the calculation of consumption expenditures, spending under all heads of consumption for all members of the family have been collected separately. For regular items of expenditure monthly data have been collected where as for other items annual data have been collected. Expenditure on consumer durables is also included under the consumption expenditure.

3.3.1. Income Distribution in the Sample Households

In the calculation of income, income from all sources of all the members of the household are collected. In the case of members having occasional employment, average number of days per month getting employment together with average wages is collected, whereas in the case of those having regular employment monthly salaries are considered.

The income distribution in the sample households is rather skewed as more income has got concentrated in the hands of few households. The bottom four income classes covering 15 per cent have only more than Rs.6000 income as in MPCY basis. The top 56 per cent households have not more than Rs 3000 per month. The rest 28 per cent are fall within Rs.3000 to Rs.6000 income class in the MPCY as shown in table 3.9.

Table 3.9: Monthly Per capita Income Category

Income Category	No of Households	Per cent
0-3000	102	56.0
3001-6000	51	28.0
6001-9000	13	7.1
9001-12000	5	2.7
12001-15000	6	3.3
Above 15000	5	2.7
Total	182	100.0

Source: Survey Data and Author's Calculation

3.3.2. Average Income and Consumption Expenditures of Occupation Groups

Under the head consumption expenditures all items under food and non-food including expenditures on consumption durables are included. Data on expenditures on each item of food were collected on a monthly basis. Data for expenditures on non-food items like clothing and footwear, medical care and health services, transport expenses, education, and pan and intoxicants were collected for each members of the family on a monthly basis., whereas for expenditure on heads such as electricity, communication and entertainment and sanitary goods and cosmetics, data were collected for the household as a whole as a monthly basis. Data on expenditure, which do not occur frequently, namely, clothing and footwear, consumer durables and other household goods and religious and cultural activities were collected on a yearly basis

for the household as a whole. The average income of different occupation groups and their consumption expenditure is shown in table 3.10.

Table 3.5: Average Income and Consumption Expenditures of Occupation Groups

Occupation Groups	Average Income	Average Consumption expenditure			Consumption income ratio	Per capita income	Per capita consumption
		Food	Non-food	Total			
Cultivators	73650	26278	35942	62220	0.84	15311	12933
Agricultural Labour	35172	20997	19456	40453	1.13	7493	8477
Non Agricultural Labour	49483	21214	26185	473999	0.95	11400	10839
Business Man	105940	27042	48537	75615	0.71	20437	14469
Self Employed in non-farm sector	120855	29049	46508	75557	0.63	23764	14857
Salaried	139679	26829	50291	77119	0.55	36213	20735
Total	74358	24854	34637	59491	0.80	15491	12361

Source: Survey Data and Author's Calculation

Here, average income for all households is Rs. 75358. The average consumption expenditure on food for all households is Rs. 24854 and for non-food items the average expenditure is Rs. 34637 followed by an average expenditure of Rs. 59491. The consumption income ratio is 0.80 for all households. The per capita income for all households' amounts to Rs. 15491 and per capita consumption comes to Rs. 12361.

However, for the different occupation group's average income, average consumption expenditure and consumption income ratio changes. The cultivators with an average income of Rs. 73649 are well off compared to agricultural labour households. These households spend an average amount of Rs. 26278 on food and Rs. 35942 on non-food items, leading to a total expenditure of Rs. 62220 and an average propensity to consume of 0.84.

The average income of the agricultural labour households is Rs. 35172 which is only 47.76 per cent of the income of cultivator households. Their annual expenditure on

food and non-food items is Rs. 29997 and Rs. 19456 respectively. The total consumption expenditure for this group is Rs. 37445 resulting in a consumption income ratio of 1.13, which points to the fact that these household live beyond their means. To meet the excess of expenditures over income, they have restored to borrowing or sale of existing assets. The average income of the non-agricultural labour households exceeds that of agricultural labour households by Rs. 14310. These households on an average spent Rs. 21214 on food and Rs. 26185 on non-food items. Like previous results, the business class is better off with an average annual household income of Rs. 105940. The average annual consumption expenditure is Rs. 75615, expenditure on food and non-food items being Rs. 27042 and Rs. 48537 respectively.

The self-employed in the nonfarm sector as a group drive more income than other groups except the group of households where the heads are employed in business kind activities. The average income of these households is Rs. 120855 and the consumption expenditure on food and non-food items are Rs. 29049 and Rs. 46508 respectively. The total consumption expenditure is Rs. 75557 and the consumption income ratio is 0.63.

The highest income group among the different occupation groups is the salaried class with an average income of Rs. 139679. The APC of these households is the lowest at 0.55. Consumption expenditure on non-food items as a percentage of total expenditure is the highest for this group.

Consumption expenditure on food and non-food items in absolute terms is the highest for the self-employed in non-farm sector followed by the salaried group and others. The non-agricultural labour class have the least in compassion to others. However, as per cent of income, the highest expenditure on food is for the agricultural labour households, who spend 59.70 per cent of their income on this item. Only for this group expenditure on no-food items is less than hat for food items. But the non-agricultural labour class, are spending more on consuming alcohols and other intoxicants. The lowest income occupation groups, namely, the agricultural labour households and the non-agricultural labour households have the highest average propensity to consume with figures of 1.13 and 0.95 respectively.

3.3.3. Average Income and Consumption Expenditure of Income Groups

Consumption pattern of households vary with income. Generally\, there is a tendency for the lower income groups to spend beyond their income. Many of the households receive low income with which they may not be able to make both the needs. They meet the excess of consumption over income either by borrowing or by sale of assets that they already possess. The average income of different income groups and their consumption expenditure is shown in table 3.11.

Table 3.11: Average Income and Consumption Expenditure of Income Groups

Income Class (Rs.)	Average Income	Average Consumption Exp.			Consumption Income Ratio	Per capita Income	Per capita Consumption
		Food	Non-food	Total			
Less than 25000	20619	17293	12613	29906	1.45	4197	7259
25000–35000	30051	19585	17744	37329	1.24	7684	9544
35000-50000	40728	21676	22602	44278	1.09	9176	9984
50000-75000	60869	25297	30303	55600	0.91	12174	11120
75000-100000	86674	26495	36398	62833	0.73	18218	13207
100000-150000	124365	29864	54969	84833	0.68	24638	16807
150000-200000	171815	33681	61918	95599	0.56	24278	13509
200000 & Above	245862	37787	109686	147472	0.59	41471	24743

Source: Survey Data and Author's Calculation

Considering the average income and consumption expenditures on food and non-food items of the different income groups, for the lowest three income groups APC is greater than one. For the lowest income group, average household income is Rs. 20619 and average consumption expenditure is Rs. 29906 leading to a consumption income ratio of 1045. In the consumption expenditure 57.82 per cent is for food and the rest for non-food items including consumer durables.

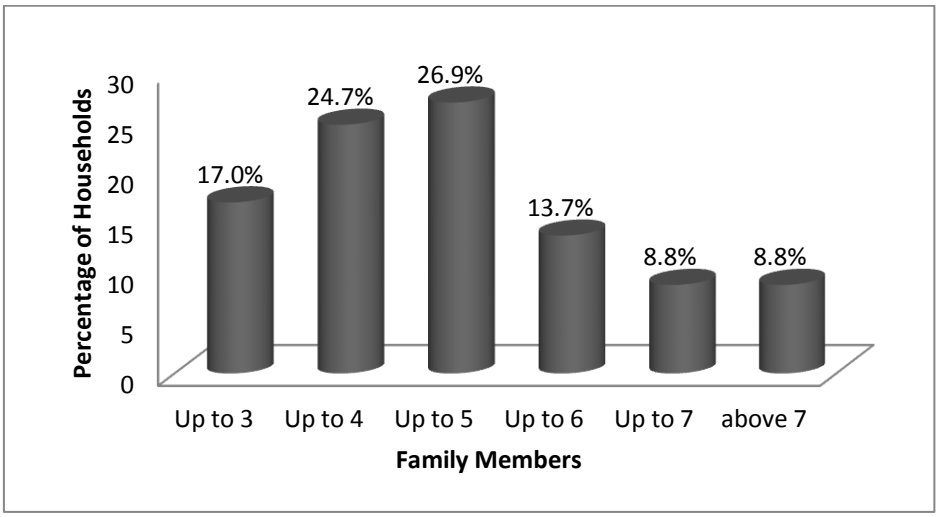
In the Rs. 25000-35000 income group, the average income is Rs. 30051, consumption expenditures being Rs. 37329 resulting in an APC of 1.24. Expenditure on food

accounts for 52.47 per cent of the consumption expenditures. Per capita income in this group is Rs. 7684 and per capita consumption is Rs. 9544. In the Rs. 35000-50000 income bracket the average income of the households is Rs. 40728 the consumption expenditure being Rs. 44278, there by the APC is 10948.25 per cent of the consumption expenditures is for food items and the rest for non-food articles of consumption. The PCI and PCC of this group are Rs. 9176 and Rs. 9984 respectively. From the Rs. 50000-75000 onwards the APC becomes less than one leading to positive saving. Average income of this group is Rs. 60869 and consumption expenditure is Rs. 55600. Out of these consumption expenditures 45.50 per cent is for food items. In the top most income class, the households enjoy an average income of Rs. 245862 out of which consumption expenditure amounts to Rs. 147472, which is 59 per cent of the total. The share of food articles in this consumption amounts to only 25.62 per cent of the total. The per capita income for this group is Rs. 41471 and per capita consumption is Rs. 24743. Thus the share of expenditure on food articles declines as the income level increases whereas the share of non-food items increase. Consumption income ratio and the per capita consumption show a downward trend as the income level increases. The higher income groups spend more on unnecessary consumption goods like consumer durables which increases the share of non-food items of their consumption expenditure. However in case of village Jaratoli and some tribal group of Militoli, though they are under low income class, a small rise in income shifted towards spend more and more on alcohols and in medical services in comparison to other expenditure indicators. It may due to lack of saving attitude and awareness among them.

3.3.4. Size of the Household and Consumption expenditure

The size of the household is a crucial factor in determining the division of income between consumption and saving. As the size of the family increases the consumption expenditures will rise. The rapid growths of population in the rural communities have negative impact on saving.

Chart 3.12: Size of the Households and their Percentage



Source: Author's Calculation

When we classified according to the size of the household the consumption expenditure steadily rises as the size of the family increases. When the size of the family is 3, the total consumption expenditure is Rs. 45008, which has increased to 103300 when the size of the family is 7 and above. The consumption income ratio has also increased from 0.73 in the case of households with 3 members to 0.95 in the case of households with 7 members or more. Expenditure on food in the case of households with 3 members is 43.91 per cent of the total which has decreased to 34.86 per cent of the total for the households with seven members or more, even though in absolute terms, expenditure on food has increased from Rs. 19763 to Rs. 36011. The average income has also shown an increasing trend with increase in the size of the family, pointing to the fact of more earning members. The size of the households with relation to their average income and their consumption expenditure has been given in the table3.13.

Table 3.13: Size of the Household and Consumption Expenditures

Size of the household	Average Income	Consumption Expenditures			APC
		Food	Non-food	Total	
Up to 3	61524	19763	25246	45008	0.73
Up to 4	66542	22781	30732	53513	0.80
Up to 5	68836	25542	31781	57323	0.83
Up to 6	82750	27834	38202	66035	0.80
Up to 7	117366	31855	56793	88647	0.76
above 7	108458	36011	67290	103300	0.95

Source: Survey Data and Author's Calculation

3.4. Conclusion

In this chapter we have examined the sources of income and expenditure pattern of the rural households. We classified the respondent's into different segments and examined the differences in expenditure pattern of different classes which partially supported the existing consumption theories especially the life cycle hypothesis. It has been found that for some lower income classes a small rise in income shifted towards spend more and more on alcohols and in medical services in comparison to other expenditure indicators. The lowest income occupation groups, namely, the agricultural labour households and the non-agricultural labour households have the highest average propensity to consume in comparison to other occupation groups.

Chapter-IV

Per-Capita Expenditure in Rural Household in Odisha on Different Items of Consumption: An Engel Ratio Analysis

The present chapter brings out a detailed discussion about the per capita consumption expenditure pattern with the help of an Engel Ratio technique. Here the consumption pattern of rural households is analysed by studying the differences in the expenditure on different items in the consumption baskets. It also attempts to examine the differences in expenditure on each of food and non-food items. Consumption is one of the most important activities of any household /individual. Expenditure on consumption is also one of the indicators of the economic well beings of the population.

4.1. Introduction

The consumption pattern of rural households is analysed by studying the differences in the expenditure on different items in the consumption baskets. The NSSO classifies expenditure in 33 items. Here, for the present study, data on 25 items have been collected and presented. This includes 12 food items and 13 non-food items. Among the food items expenditure on cooked food purchased is included as a new item of expenditure. This is because we found a considerable number of non-agricultural labour class households used to purchase cooked food or used to eat in hotels. For other class people it is also due to the introduction of first food culture in the market, they used to purchase like egg fry, Manchurian etc. The table presents the average MPCE and Engel ratio estimated from household consumption expenditure data. It also attempts to examine the differences in their expenditure on each of food and non-food items. The total MPCE of sample households is divided in to 25 standard groups that 12 food groups and 13 non-food groups.

4.2. MPCE on different food items

As shown in table 4.1 the total monthly expenditure on different food item is Rs. 330.40 which is 64% of average MPCE. It is comparatively more than the expenditure on non-food items. The Engel ratio shows that a person likes to spend more on cereals

which is common for all population groups. At the same time he/she also wants to spend more on non vegetarian items and beverages. He/she also spends more on purchasing cooked food which is about Rs. 10.67 per month as shown in the table. Because of the availability of tasty first foods and lack of time they spend more in such items.

Table 4.1: Average Monthly Expenditure Per-person on Different Items (Food)

S. No	Item	Average MPCE (Rs.)	Engel Ratio
1	Cereals	85.32	25.82
2	Pulses	17.12	5.18
3	Milk & Milk Products	20.45	6.18
4	Edible Oil	23.65	7.15
5	Meat, fish & Egg	50.19	15.18
6	Vegetables	30.5	9.23
7	Fruits	10	3.02
8	Sugar	8.25	2.49
9	Beverages (Including Handia)	30.77	9.31
10	Salts	3.42	1.03
11	Spices	15.48	4.68
12	Cooked Food Purchased	35.28	10.67
	Total Food Expenditure	330.43	100

Source: Author's Calculation

4.3. MPCE on Different Non-Food Items

Similarly as shown in Table 4.2 the total monthly expenditure on different non-food items is about to Rs. 187.77 which is less than the monthly expenditure on food items. It is only 36 percent of average MPCE. In table 4.2 the Engel ratio shows that among the non-food items a person is highly addicted towards consumption of Pan, Tobacco, khaini and other intoxicants for which he/she spends more in comparison to other non-food items. But it is interesting to see that the expenditure on education is very less. It's because of the lack of awareness to posses' higher education and availability of free books and study materials in the school. On the other hand it has also been observed that the expenditure on medical services and buying medicines is high in comparison to the general expenditure. It's because of the negligence of the rural people when they feel ill and due to working in unhygienic conditions, drinking un-purified water and drinking as well as smoking habit. They used to suffer more from TB, Malaria and typhoid etc.

Table 4.2: Average Monthly Expenditure Per-Person on Different Items (Non-Food)

S. No	Item	Average MPCE (Rs.)	Engel Ratio
1	Pan, tobacco, khaini & other intoxicants	47.34	25.21
2	Household Furnishings and Equipment	12.35	6.57
3	Clothing	22.19	13.46
4	Footwear	2.61	2.45
5	Education	2.1	1.11
6	Medical	15	7.98
7	Entertainment	7.33	3.90
8	Personal care	14.16	7.54
9	Travel	12.79	6.81
10	Electric, electronics and communication	15.23	8.11
11	Agriculture	3.6	1.91
12	Durable goods	17.96	9.56
13	Miscellaneous goods and services	10.11	5.38
	Total Non-Food Expenditure	187.77	100

Source: Author's Calculation

4.4. MPCE on Different Items of Consumption

The per capita 30 days consumer expenditure of Rs. 518.2 was spilt up in to Rs. 330.43 on an average on food and Rs. 187.77 for non-food. Food constituted 64 percent and non-food 36 percent of MPCE. Among food items Cereals constituted 16.49 percent. It was supposed to be more, but due to availability of PDS facilities, it was less. Similarly for meat, fish, egg constituted 9.68 percent, vegetables 5.88 percent and fruits 1.92 percent. The Engel ratio for cooked food purchased was 6.80 percent, for spices 2.98 percent and for milk and milk products 3.94 percent as shown in Table 4.3 and chart 4.4.

Table 4.3: Average Monthly Expenditure on Different Items (Both Food and Non-Food)

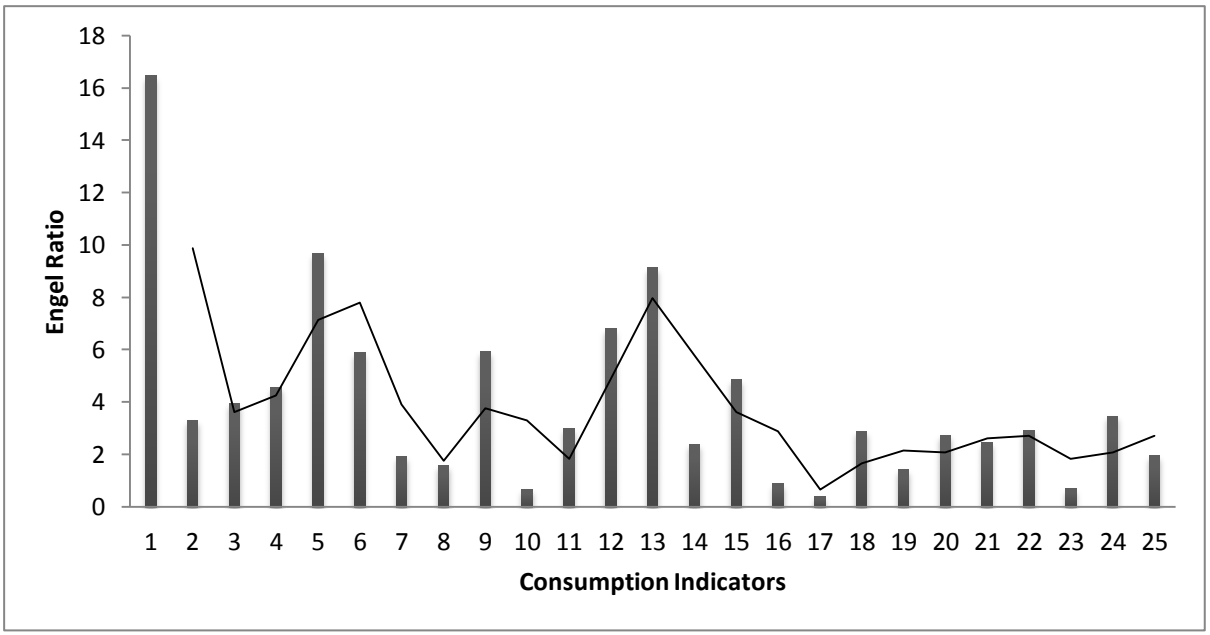
Sl. No	Items	Average MPCE (Rs)	Engel Ratio
1	Cereals	85.32	16.46
2	Pulses	17.12	3.3
3	Milk & Milk Products	20.45	3.94
4	Edible Oil	23.65	4.56
5	Meat, fish & Egg	50.19	9.68
6	Vegetables	30.5	5.88
7	Fruits	10	1.92
8	Sugar	8.25	1.59
9	Beverages (Including Handia)	30.77	5.93
10	Salts	3.42	0.65
11	Spices	15.48	2.98
12	Cooked Food Purchased	35.28	6.8
13	Pan, tobacco, khaini & other intoxicants	47.34	9.13
14	Household Furnishings and Equipment	12.35	2.38
15	Clothing	25.19	4.86
16	Footwear	4.61	0.88
17	Education	2.1	0.4
18	Medical	15	2.89
19	Entertainment	7.33	1.41
20	Personal care	14.16	2.73
21	Travel	12.79	2.46
22	Electric, electronics and communication	15.23	2.93
23	Agriculture	3.6	0.69
24	Durable goods	17.96	3.46
25	Miscellaneous goods and services	10.11	1.95
	Total Consumer Expenditure	**518.2**	

Source: Author's Calculation

Among non-food items, Engel ratio for Pan, tobacco and intoxicants alone accounted to **9.13%** which greater in comparison to other non-food items. Because it is an everyday expenditure and one can't leave it easily. Miscellaneous goods and services which includes rents, interests, Veti, Pahuna, paid to beggars and spend towards contribution and dues for social clubs, co-operatives etc. is **1.95%.** It also includes spend on buying lottery tickets and other games of chance. The people in the sample area used to buy lottery during Diwali and Dec-25 only. The MPCE on this also

includes spend on service charges for opening saving accounts including safety deposit box charges, stock and bond commissions and expenses for fines, loss of deposits and money lost or stolen.

Chart 4.4: Trend line for Average Monthly Expenditure on Different Items



Source: Author's Calculation

While expenditure on clothing and foot wear accounted 4.86% and 0.88% respectively, household furnishings and equipment constituted 2.38%, medical constituted 2.89%, entertainment constituted 1.41%, personal care 2.73%, travel 2.46%. Electronic and communication constituted 2.93% which includes spend on purchase of cell phones, DTH/Dish TV antenna, electric bills, recharge vouchers, mobile song downloading, and rental of cable vision services etc.

As most of the population are belongs to non-agricultural labour, they spend a very less in agricultural activities which is just 0.69%. Similarly expenditure on Education is peculiar which just 0.40%. There is a lack of interest and awareness among the people towards education. They don't prefer towards higher education. Though the parents have interest but the children don't wants to read or go to school.

4.5. Per-capita Consumption of Individual Items (Food)

Per capita expenditure for different items of consumptions is presented based on sample data. This section gives an analysis of the per capita consumption expenditure of the rural households on individual items.

4.5.1. Consumption of Cereals

Out of the 200 sample households the expenditure data on cereals of all households were available. The table shows that the number of households, which spend between Rs. 50 to 60 per person monthly, was highest in the sample. Nearly 19% of the households fell under this expenditure class. There are 11 % of families whose per capita expenditure per month on cereals was below Rs. 40.

Table 4.5: MPCE on Cereals by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
Below 30	4	2	2
30-40	18	9	11
40-50	26	13	24
50-60	38	19	43
60-70	24	12	55
70-85	36	18	73
85-100	26	13	86
Above 100	28	14	100
Total	100	100	

Source: Survey Data and Author's Calculation

4.5.2. Consumption of Pulses

Pulses do not form major consumption item for all the sample families. 10% of the households did not spend any amount on pulses. Others take very less of this in their consumption basket. The majority of the households come under the expenditure class of Rs. 20.

Table 4.6: MPCE on Pulses by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	54	30	30
10-20	90	50	80
20-30	30	17	97
30 & Above	6	3	100
Total	180	100	

Source: Survey Data and Author's Calculation

4.5.3. Consumption of Milk and Milk Products

The table shows that 64 sample families are missing from Milk and Milk products consumption. They could not afford to spend on this item as they belonged to the lower income category, even though it is a nutritious item. It was noticed that many of them who belong to higher expenditure classes were not particular about spending on milk though they allocate pretty good amount to the consumption of meat, egg and fish. Some also consume milk only when they feel week and in case of having own cow. This indicates the particular food habits of rural people in the study area and their preference to non-vegetarian food.

Table 4.7: MPCE on Milk and Milk Products by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	20	14.70	14.70
10-20	24	17.64	32.35
20-30	40	29.41	61.76
30-40	30	22.05	83.82
40-50	12	8.82	92.64
50-60	6	4.41	97.05
Above 60	4	2.94	100
Total	136	100	

Source: Survey Data and Author's Calculation

4.5.4. Consumption of Edible Oil

All households reported expenditure on Edible Oil. 60% of the families belonged to the per capita monthly expenditure class of Rs. 20 to 30. It was noticed that both rural and urban consumers are not motivated to the consumption of sophisticated oil brands. Most of the consumers are not using modern types of oil. They used to buy open drum oil.

Table 4.8: MPCE on Edible Oil by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	12	6	6
10-20	46	23	29
20-30	120	60	89
30-40	14	7	96
Above 40	8	4	100
Total	200	100	

Source: Survey Data and Author's Calculation

4.5.5. Consumption of Sugar

All households had spent on Sugar consumption. The households clustered in the expenditure classes of below Rs. 20 constituted 97%. Sugar as a food item, cannot be consumed at a higher level due to health reasons. Even the middle income families had not spent much on this item, unlike any non-food items. The level of sugar consumption would not go up beyond a certain level unlike in the case of non-food, non-essential commodities. Most of them use sugar only for tea consumption.

Table 4.9: MPCE on Sugar by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	32	16	16
10-20	162	81	97
Above 20	6	3	100
Total	100	100	

Source: Survey Data and Author's Calculation

4.5.6. Consumption of Meat, Fish and Egg

It is found that the consumption of meat, fish and egg constitutes one of the prominent items in the consumption basket. Only 7% families are fully vegetarian. Rest 93 % consume meat, fish and egg. The majority of households fall within Rs.40 to 50 per capita expenditure class.

Table 4.10: MPCE on Meat, Fish and Egg by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	7	3.76	3.76
10-20	14	7.52	11.29
20-30	11	5.91	17.20
30-40	25	13.44	30.64
40-50	69	37.09	67.74
50-60	26	13.97	81.72
60-70	12	6.45	88.17
70-85	8	4.30	92.47
85-100	9	4.83	97.31
Above 100	5	2.68	100
Total	186	100	

Source: Survey Data and Author's Calculation

4.5.7. Consumption of Vegetables

Vegetable was one of the items for which consumption out of home-grown stock was reported. So, nine households are missing from the vegetable consumption.

Table 4.11: MPCE on Vegetables by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	20	10.47	10.47
10-20	21	10.99	21.46
20-30	44	23.03	44.50
30-40	70	36.64	81.15
40-50	20	10.47	91.62
Above 50	16	8.376	100
Total	191	100	

Source: Survey Data and Author's Calculation

4.5.8. Consumption of Fruits

It was found that 8% of the sample households did not consume fruits due to very poor and due to home grown of some fruits. It is clear that consumption of this item was largely determined by the income factor. Many of those who could not allocate some portion of their income on the consumption of the item were poor people. For them this item is a luxury, whatever may be its nutritional importance. 66 % of the households spent a small sum of less than Rs. 20 per person monthly on Fruits. Only 2% could afford to spend more than Rs. 50 per person.

Table 4.12: MPCE on Fruits by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	68	36.96	36.96
10-20	54	29.35	66.31
20-30	48	26.09	92.40
30-40	3	3.26	95.66
40-50	2	2.17	97.83
Above 50	2	2.18	100
Total	184	100	

Source: Survey Data and Author's Calculation

4.5.9. Consumption of Beverages (Including Handia*)

Among the total households the tribal class falls within the per capita expenditure class of Rs. 30-40. It is 34.5 %. They drink Handia and also liquors at a high rate in comparison to the other class people. Similarly the Muslims and other general community drink tea as an everyday habit.

Table 4.13: MPCE on Beverages by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	19	9.5	9.5
10-20	41	20.5	30
20-30	30	15	45
30-40	69	34.5	79.5
40-50	23	11.5	91
Above 50	18	9	100
Total	200	100	

Source: Survey Data and Author's Calculation

4.5.10. Consumption of Spices

Like cereals, spices also constitute an ingredient in rural diet. It is an inevitable item in the food basket of rural people. 75% families spend Rs. 10 to 20 on spices, even if they are poor, it does not matter.

Table 4.14: MPCE on Species by Households

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	32	16	16
10-20	150	75	91
20-30	15	7.5	98.5
Above 30	3	1.5	100
Total	200	100	

Source: Survey Data and *Author's Calculation*

* *Handia is a rice beer prepared by pasteurisation of rice mixed with different roots and fruits. It is mostly prepared by the tribal of north eastern India. In Odisha it is mostly used by tribal of north and south Odisha. They use this in their social rituals like marriage, divine festivals. They believed that drinking of rice bear is a holy practice. They offer the rice bear to their god and goddesses and after offering they distribute among themselves and enjoy.*

4.5.11. Consumption of Salt

Out of 200 rural families 100% of households fell in the expenditure class of below Rs. 10 per head. Extreme levels of consumption are not found here. This is because there is a limit for the quality for salt that one could consume.

Table 4.15: MPCE on Salt by Households

Per capita exp. Class	No. of Households	Percentage	Cu. Frequency
1-10	200	100	100
10-20	0	0.00	0
Total	100	100	

Source: Survey Data and Author's Calculation

4.5.12. Expenditure on Cooked Food Purchased

It is found that about 60% of the total households did not spend on cooked food purchased from outside their homes and more than half of those who spend less than Rs. 50 per capita per month on the item. There are 20% of households who spend more than Rs.100 on the item. It was found that most of the members in the sample area being non-agricultural labourers they are far off in their work place and are unable to take food from their own houses. Only women workers those belong to ST community used to take Handia/Water Rice from their home.

Table 4.16: MPCE on Cooked Food Purchased

Per capita exp. Class	No. of Households	Percentage	Cu. Frequency
1-50	42	53.84	53.84
50-100	20	25.64	79.48
Above 100	16	20.51	100
Total	79	100	

Source: Survey Data and Author's Calculation

4.6. Per capita consumption of individual items: Non-food

MPCE on non-food items has also been analysed to understand the difference between expenditures on food and non-food items.

4.6.1. Consumption of Pan, Tobacco and Intoxicants

Pan, tobacco and intoxicants form a major consumption item for almost all the sample households. The table shows that out of the total 200 households 184 (92%)

households spent on these items. Consumption of pan, tobacco and intoxicants is at high level among the ST as per the sample data. Expenditure incurred on the items indicates that a considerable percentage of the population consume extravagantly. They have an average per capita per month expenditure of Rs. 40 to 50 on this item, which is so high and peculiar in comparison to other indicators. Even among lower expenditure and income classes the expenditure on this item is found much higher. The low per capita income position of the households along with higher expenditure on pan tobacco and intoxicants adversely affects their consumption standard. It is observed that those households having larger expenditure on the item especially in the lowest expenditure classes have not even the basic consumption requirements. This is true and is one of the most important reasons for the very low consumption standards of rural people especially ST community in comparison to general households as observed.

Table 4.17: MPCE on Pan Tobacco and Intoxicants

Per capita exp. class	No. of Households	Percentage	Cu. Frequency
1-10	19	10.32	10.32
10-20	19	10.32	20.65
20-30	15	8.15	28.80
30-40	12	6.52	35.32
40-50	48	26.08	61.41
50-60	13	7.06	68.47
60-70	26	14.13	82.60
70-85	8	4.34	86.95
85-100	5	2.71	89.67
100-125	4	2.17	91.84
125-250	9	4.89	96.73
250 above	6	3.26	100
Total	184	100	

Source: Survey Data and Author's Calculation

4.6.2. Consumption Expenditure on Household Furnishings and Equipment

Although 42% of households made some expenditure on this item but it is not significant like other items. They spend a very less on this. They are not much worried about their housed furnishing. Only some rich class families have incurred their expenditure fall below Rs 20 per person per month. 47% spends below Rs. 10 to 20 per month per person. Rest 53% of the households spends above Rs. 20. It includes

household spend on mattresses and furniture for indoor or outdoor use. They are not much interested for wearing ornaments. Only few households spend on buying silver ornaments, and some Muslim class spend on buying gold's. Repairing of existing houses also comes under this item, but few have spent on this.

Table 4.18: MPCE on Household Furnishings and Equipment

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	8	9.52	9.52
10-20	32	38.09	47.61
20-30	20	23.80	71.42
30-40	18	21.42	92.85
40-50	6	7.14	100
Above 50	84	100	

Source: Survey Data and Author's Calculation

4.6.3. Consumption Expenditure on Clothing

Among the higher expenditure classes, expenditure on clothing increases rapidly. Per capita expenditure on clothing for the lowest 65 % of households is below Rs. 50. These classes buy dresses only during major festivals or any cultural activities. 19% of households spend Rs. 50-100 per capita per month on the item. Rest 16% of households spend above Rs. 100 per capita per month on clothing. These classes used to buy frequently and from road side or cheap shops and venders.

Table 4.19: MPCE on Clothing by Households

Per capita exp. class	No. of Households	Percentage	Cu Frequency
10-20	2	1	1
20-30	90	45	46
30-40	28	14	60
40-50	10	5	65
50-65	4	2	67
65-80	20	10	77
80-100	14	7	84
Above 100	32	16	100
Total	200	100	

Source: Survey Data and Author's Calculation

4.6.4. Consumption Expenditure on Footwear

Nearly 4% of the households are not spending any amount in their MPCE on the item. Per capita expenditure on footwear for the lowest 60% of households is below Rs. 10. Rest 40% of households spend between Rs.20 to 30 per capita per month on footwear. These classes used to buy 2 times in a year.

Table 4.20: MPCE on Footwear by Households

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	116	60.41	60.41
10-20	60	31.45	91.66
20-30	16	8.33	100
Above 30	192	100	

Source: Survey Data and *Author's Calculation*

4.6.5. Consumption Expenditure on Education

Of the 200 households only 156 households reported to spend on Education. Since ST class receive the various types of financial assistance for education from government per capita expenditure estimates on the item presented here may not be the actual picture.

Table 4.21: MPCE on Education by Households

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	96	61.53	61.53
10-20	38	24.35	85.89
20-30	14	8.97	94.87
Above 30	8	5.12	100
Total	156	100	

Source: Survey Data and Author's Calculation

4.6.6. Consumption Expenditure on Medical Services

Medical expenditure is a very important item among non-food expenditure. Expenditure on Medicines and medical services of different households is determined by a number of factors and hence expenditure data on the item have been collected for last 30 days and also for previous 365 days. Nearly 17% of the households are not spending any amount on medical. Nearly 94% of the households, who spend, spend below Rs. 50. Among households belonging to the top expenditure class, i.e. rest 6 % spend above Rs. 50.

Table 4.22: MPCE on Medical Services by Households

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	29	17.46	17.46
10-20	90	54.21	71.68
20-30	11	6.62	78.31
30-40	17	10.24	88.55
40-50	9	5.42	93.97
Above 50	10	6.02	100
Total	166	100	

Source: Survey Data and Author's Calculation

4.6.7. Consumption Expenditure on Entertainment

Out of the 200 households only 158 (79%) households spend on entertainments. About 76% of households who spent on the item are between Rs. 1-20 per month. It may be due to their lower income and unavailability of fair and entertainment place. It is found that even for the upper MPCE classes' expenditure on Entertainment does not constitute a major item among non-food items. The influence of place of residence is much less in the determination of expenditure on recreation and entertainment among rural households.

Table 4.23: MPCE on Entertainment by Households

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	84	53.16	53.16
10-20	37	23.41	76.58
20-30	26	16.45	93.03
30-40	5	3.16	96.20
40-50	3	1.89	98.10
Above 50	3	1.89	100
Total	158	100	

Source: Survey Data and Author's Calculation

4.6.8. Consumption Expenditure on personal care

It is found that ST and SC population of the sample area do not show preference to spending more on cosmetics and other personal communities and whatever expenditure on the item is recorded in on account of expenditure on hair cutting, saving, shampoos, tooth paste, brush, shop, detergent powder etc. But in case of Muslim class, it shows a higher proportion then the ST/SC class. 86% of households

spend less than Rs. 20. 96% of sample households spend below Rs. 50 per person per month on the item. Households belonging higher MPCE classes spending more than Rs. 50 per person constitute only 4%.

Table 4.24: MPCE on Personal Care by Households

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	102	51	51
10-20	70	35	86
20-30	14	7	93
30-40	2	1	94
40-50	4	2	96
Above 50	8	4	100
Total	200	100	

Source: Survey Data and Author's Calculation

4.6.9. Consumption expenditure on Travel and Conveyance

Beside Travel expenditure needs of households differ based upon the nature of jobs, place of residence etc. 76% of households had an average expenditure of below Rs. 30. 95% of households had an average expenditure of below Rs. 60 per month per person. Only those who are working in Bombay, Calcutta, and other big cities as migrant labour constitute 5% of households who spends Rs. 60-250 per month on the item. Even all households are not spending on travel, only 69% of households spending on this item. Other uses cycles to go to the work place and for other purpose.

Table 4.25: MPCE on Travel and conveyance

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	21	18.42	18.42
10-20	53	46.49	64.91
20-30	13	11.40	76.31
30-40	11	9.64	85.96
40-50	7	6.14	92.10
50-60	3	2.63	94.73
60-250	6	5.26	100
Total	114	100	

Source: Survey Data and Author's Calculation

4.6.10. Consumption Expenditure on Electric, Electronics and Communication

Among the total households 70% households are accessible to electricity and rest 30% are not. But among the 70%, all are not legal consumers, they are using by the help of their neighbours. However they have TV, CD player and other electronic assets. Some of them got free electricity as they are belongs to BPL beneficiary and some are waiting to get this free service by the Govt. of Odisha under Biju Gram Jyoti Yojana. So, all consumers are not spending much amount on paying electric bills except for the uses of electric and electronic assets. The data shows that 54% households have mobile phones though they haven't sanitation facility. They are spending a large proportion of their income in downloading mobile songs, buying CDs, vouchers and other mobile accessories etc. Some of them used to buy new china mobiles frequently. About 45 % of households are spending below Rs. 20 per month on these items. 86% of households spending below Rs. 50 and rest 14% spend above 50 rupees.

Table 4.26: MPCE on Electrics, Electronics and Communications

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	23	16.42	16.42
10-20	41	29.28	45.71
20-30	17	12.14	57.85
30-40	11	7.85	65.71
40-50	29	20.71	86.42
Above 50	19	13.57	100
Total	140	100	

Source: Survey Data and Author's Calculation

4.6.11. Consumption Expenditure on Agriculture

It is interesting that the consumption expenditure on Agriculture very low though it's a rural study. It's due to the existence of barter system among the farmers. On the other hand a few portion of the total sample are belongs to agriculture farmer. Only 18% households are belongs to cultivator group. Including this 30% households are spending on agriculture. Because some land fewer farmers also take some land on lease for cultivation purpose. 80% households are spending below Rs.30 and rest 20 % spending Rs. 30-50 per month basis.

Table 4.27: MPCE on Agriculture

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	19	31.66	31.66
10-20	20	33.33	65
20-30	9	15	80
30-40	7	11.66	91.66
40-50	5	8.33	100
Total	60	100	

Source: Survey Data and Author's Calculation

4.6.12. Consumption Expenditure on Durable goods

Like Expenditure on agriculture, expenditure on durable goods being not a regular item in the consumption basket for every month, data on the item was collected for the last 30 days and also previous 365 days. Data Presented here shows average one month expenditure on the item based on 365 days expenditure data collected. The 44 % of the sample households have reported to spend on the item. This shows that durable goods do not constitute an important item in the consumption basket of rural people belonging to lower expenditure classes. Among those who spend 73% spend on the item to the extent of Rs. 1-50 per head monthly and 27% spend above Rs. 50. Average expenditure on the item is Rs. 17.96, which constituted 3.51% of the total MPCE. I found that they are spending considerable amount on durable goods. Among them upper MPCE classes households spend conspicuously on the item. Some households used to buy only during fairs and from village venders called Feribala at cheaper rate. They are not worried about lasting or durability of the assets.

Table 4.28: MPCE on Durable Goods

Per capita exp. class	No. of Households	Percentage	Cu Frequency
1-10	22	25	25
10-20	20	22.73	47.73
20-30	8	9.09	56.82
30-40	4	4.55	61.37
40-50	10	11.36	72.73
Above 50	24	27.27	100
Total	88	100	

Source: Survey Data and Author's Calculation

4.6.13. Consumption Expenditure on Miscellaneous Goods and Services

The study has also collected data on other items of non-food expenditure such as expenditure on other miscellaneous items. Taxes, Rent, newspaper and magazines, household work etc. The data has shown that expenditure on each of these items constitute only negligible amount (or not at all) in the consumption basket, hence has not included in the analysis. Thus it takes an average of Rs. 10 per head per month. It includes spend on service charges for banks and other financial institutions, spend on buying lottery tickets and other games of chance, expenses for fines, loss of deposits, and money lost or stolen, contribution and dues for social clubs, co-operatives, political and alumni associations. It also includes households spend on Alms.

4.7. Conclusion

Items like cereals, edible oil, vegetables, spices and fuel & light are found to be treated as necessities. On the other hand, egg, fish & meat, sugar, education and medical are found to be luxuries for all expenditure classes and pulses and fruits are reported to be in luxury basket for low income classes. Household size is found to have different effects on household consumption pattern. We have also includes the factors like occupation, and religion in our analysis and they are found to be helpful in explaining the variation of budget shares of the commodities in most of the case.

Chapter-V

Summary and Conclusion

India attained independence more than half a century. Ever since our national leaders and the successive govt. have brought about a number of reforms with the specific objective of alleviating the poverty from the grass root level especially the backward communities. Despite all these efforts we find that even now they continue to remain marginalised from enjoying the fruits of development. In this context, the present study made an attempt to analyse the socio-economic background and the consumption pattern of rural households in Sundargarh district. The summary of the findings on various aspects and recommendations of the study are given in this chapter.

It is found that (considering all expenditure classes) the average MPCE of ST/SC's is lower than that of general households, also lower than the Muslim class. MPCE on both food and non-food is higher for general households. Tribal class belonging to top expenditure class spend more on food items like cereals, fish and egg, chicken and non-food items like pan, tobacco and intoxicants. These groups spend less on food items like Milk and milk products, pulses, fruits, refreshments and non-food items like foot wear, education, clothing etc.

The study has found that the levels of living of the rural households have improved than before, but accordingly the prices of goods and services in the market have also increased, so the degree of improvement is not much high in comparison as it is visible. The availability of facilities and opening up of new markets nearer to village enforces the rural poor to spend more but not to standardise their spending behaviour. Their consumption pattern is still bad. Except income and poverty, their nature and lack of proper awareness also badly affects their consumption pattern. They should shift their consumption behaviour from lower indicators to standard indicators.

Large percentage of the rural mass belongs to low income groups. This is due to their very low economic status and the consequent employment prospects in low paying occupations. Effective implementation of the schemes for their economic improvement is needed for improving their consumption standard. Educational concessions to rural people should be continued wherever necessary. For their economic improvement a change in occupational pattern is necessary. The minimum wage act in the case of working poor or labourers should be enforced. Govt. should try to provide water for agriculture to their lands throughout year. Schemes for improving the health standards of women and children are necessary to improve their consumption standards. Majority of the households having low educational status are either not aware or are careless of the importance of better health standard. They should not delay in health check-up. Hence they are found to be addicted to alcoholic beverages, wine, pan, tobacco and drugs and intoxicants, which adversely affects not only their health but also hinders their economic progress. This also adversely affects the consumption standards of the other members of the households. Decision to spend should be from all members' opinion in a household. They should choose more nutritious items in place of alcoholic items.

Limitations of the Study

The major limitations of the study on changing household consumption pattern of rural households is that the quality of the estimates depends on the reliability of the data collected on each item of expenditure may have errors due to memory lapses of the respondents. Besides errors arising out of lack of co-operation of the respondents, deliberate understatement, overstatement or evasion of information etc. may affect the result.

In the analysis of consumption expenditure was made for differences in household size and, age structure of sample households. Expenditure patterns have been compared ignoring these household characteristics. There may be wide differences between consumption patterns of the different sub groups within the rural households because of multi religion which has not been attempted. Especially by nature no human being interested to give exact information regarding his/her income. So here household income is an average measure which may not give the 100% true result.

Similarly, as we found that the highest income group among the different occupation groups is the salaried class with an average income of Rs. 139679. The APC of these households is the lowest at 0.55 which is less than that of belonging to other occupation. In other words, the lowest income occupation groups, namely, the agricultural labour households and the non-agricultural labour households have the highest average propensity to consume in comparison to other occupation groups. Consumption expenditure on non-food items as a percentage of total expenditure is the highest for this group. The findings partially supported the existing consumption theories especially the life cycle hypothesis. It has been found that for some lower income classes a small rise in income shifted towards spend more and more on alcohols and in medical services in comparison to other expenditure indicators. We also found some remarkable indicators like religion, social relation, rituals, beliefs, lack of saving attitude, family decision making etc. are largely influencing the rural consumption pattern. Items like cereals, edible oil, vegetables, spices and fuel & light are found to be treated as necessities. On the other hand, egg, fish & meat, sugar, education and medical are found to be luxuries for all these rural expenditure classes and pulses and fruits are reported to be in luxury basket for low income classes. Household size is found to have different effects on household consumption pattern. We have also includes the factors like occupation, and religion in our analysis and they are found to be helpful in explaining the variation of budget shares of the commodities in most of the case.

Scope for Further Research

This is a preliminary study of household consumption pattern in Odisha. Further research needs to be done to identify the role of prices (own as well as complements/substitutes) in budget shares, especially for states like Odisha which are found to be inefficient in allocating their resources. Government should make appropriate policies to reduce the inequality in the rural areas to correct the differences in income effect. Introducing the price effect into this analysis may provide some more information so that policy could be thought of in terms of changing the relative prices to correct the consumption pattern in these areas.

BIBLIOGRAPHY

Behrman, Jere and Deolalikar Anil B. (1987), "Will Developing Country Nutrition Improve with Income? A Case Study for Rural South India," *Journal of Political Economy*, 95. 108-38.

Bhattacharya N. and Chatterjee G.S. (1971), "Consumer Prices and per Capita Household Consumption in Rural India: Variation between States", *Economic and Political Weekly*, 6 (44), 2249+2251-2253, October 30.

Chakravarti A.K. (1970), "Food grain Sufficiency Patterns in India", *Geographical Review*, 60 (2), 208-228, April.

Chatterjee G.S. and Bhattacharya N. (1969), "Rural-Urban Differentials in Consumer Prices in India", *Economic and Political Weekly*, IV, 20, 850-853.

Chudali1 H., Choudhury A. and Ali Md. H.(2011), "Socio-economic Analysis of Consumption Patterns of Nepalese People", *Economic Affairs*, 56 (2), 213-218, June.

Directorate of Economics and Statistics, July 2006 to June 2007.

Economic Survey (2009-10), Government of India.

Ferna´ndez-Villaverde J. and Krueger D. (2007), "Consumption Over the Life Cycle: Facts From Consumer Expenditure Survey Data", The *Review of Economics and Statistics*, August 2007, 89(3): 552–565.

Friedman Milton (1957), "A Theory of the Consumption Function", *National Bureau of Economic Research (NBER)*, Princeton University Press, pp. 1-6, ISBN: 0-691-04182-2.

Gangopadhyay Shubhashis and Wadhwa Wilima (2004), "Changing Pattern of Household Consumption Expenditure", *SERFA*, August.

Handbook of Statistics on Indian Economy (2010), Annual Publication, RBI.

Jacoby Hanan G. and Skoufias Emmanuel (1998), "Testing Theories of Consumption Behavior Using Information on Aggregate Shocks: Income Seasonality and Rainfall in Rural India",

Kumar Gopalakrishna B. (1990), "Consumption Disparities, Food Surpluses and Effective Demand Failures: Reflections on Macroeconomics of Drought Vulnerability", *Economic and Political Weekly*, 25 (10), 499-508, March 10.

Kumar Naveen and Aggarwal Suresh Chanda (2003), "Patterns of Consumption and Poverty in Delhi Slums", *Economic and Political Weekly*, 38 (50), 5294-5300, December 13-19.

Lampietti Julian A. and Stalker Linda (2000), "Consumption Expenditure and Female Poverty: A Review of the Evidence", *Policy Research Report on Gender Development, Working Paper Series No. 11*, World Bank, April.

Lawrence Haddad and Kanbur Ravi (1990), "How Serious if Neglect of Intra-Household Inequality?" *The Economic Journal* 100 (30), 866-88.

McLeod J.C., Omawale A.A. and Jackson A.A. (1988), "Household Food Consumption Behaviour in St. James, Jamaica", *Social and Economic Studies*, 37 (3), 213-235, Septemeber.

N.S.S. 63rd Round based on "Level and Pattern of Household Consumer Expenditure in Delhi",

Paul Glewwe and Hall Gillette (1995), "Who is Most Vulnerable to Macroeconomic Shocks?

Pavithra B.S. (2008), "An Economic Analysis of Food Consumption Pattern in Karnataka with Special Reference to Mysore District", *Thesis submitted to the University of Agricultural Sciences, Dharwad in partial fulfillment of the requirements for the Degree of M.Sc. in Agricultural Economics, July.*

Pavithra B.S., Basavaraja H., Kiresur V.R., Mahajanshetty S.B. and Mageri S.N. (2009), "An Economic Analysis of Food Consumption Pattern in Karnataka", *Karnataka J. Agric. Sci.*, 22 (4), 840-845.

Qadeer Imrana and Priyadarshi Anju P. (2004), "Expenditure and Consumption Patterns: Implications for Nutrition policy", *NFI Bulletin*, 25 (4), October .

Reddy Amarender A. (2004), "Consumption Pattern, Trade and Production Potential of Pulses", *Economic and Political Weekly*, 39 (44), 4854-4860, October 30- November 5.

Thomas, D. (1997), "Incomes, Expenditures, and Health Outcomes: Evidence on Intrahousehold Resource Allocation in Developing Countries." In *Intrahousehold Resource Allocation in Developing Countries*, edited by L. Haddad, J. Hoddinot and H. Alderman. Baltimore: Johns Hopkins.

Vaidyanathan A. (1985), "Food Consumption and Size of People: Some Indian Evidence", *Economic and Political Weekly*, 20 (30), PE79-PE84, July 27.